Model 6977
Axis Jackson System®
OWNER'S MANUAL

(English Version)

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NOTICE TO PURCHASER:

MIZUHOSI®, Axis Jackson®, Axis Jackson System®, GentleTouch®, Torso Trolley™, Advance Control Pad System™, and IVSP™ are trademarks of Mizuho OSI and the Mizuho Corporation.

The Axis Jackson System® Model 6977 is a Class II, Exempt Device within the guidance of 21 CFR Part 860 Medical Device Classification Procedures. The 6977 is Class I, in accordance with Rule I of the Medical Device Directive Guidance Document MDDEV 2.4/1, Guidelines for the Classification of Medical Devices.

The Axis Jackson System® Model 6977 is intended for use as a patient positioning surgical support system for thoracic and lumbar spine procedures. It provides for a wide range of intra-operative angular movement with the patient positioned prone, supine, or lateral. Patent pending.

All other trademarks in this document are the sole property of their respective owners.

Printed in the USA, 2009
Part Number NW0507, Revision F

AXIS JACKSON SYSTEM
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1.0 SAFETY INFORMATION

Safety Conventions Used In This Document

Document User Attention Words

Five user attention words may appear in the text of this Mizuho OSI Owner's Manual. Each user attention word implies a particular level of observation or action as described below.

Note: Calls attention to useful information.

IMPORTANT: Indicates information that is necessary for proper product operation.

CAUTION Indicates a potentially hazardous situation which if not avoided may result in minor or moderate injury. It may also be used to alert against unsafe practices.

WARNING Indicates a potentially hazardous situation which if not avoided could result in death or serious injury.

DANGER Indicates an imminently hazardous situation which if not avoided will result in death or serious injury. This signal word is to be limited to the most extreme situations.

Before Using This Product

Ensure that everyone involved with the use or maintenance of this product has read the Owner's Manual.

CAUTION Avoid using this product in a manner not specified by Mizuho OSI.

IMPORTANT: The positioning techniques and applications outlined in this manual are the manufacturer's suggested techniques. The final disposition of each patient's care as related to the use of this product rests with the attending physician.

Safety and Health Symbols Used

The following Table (T-1) describes the symbols displayed on the Axis Jackson System and referenced within this Owner's Manual.

Table T-1

Symbol	Description	Used On Product	Used In Manual
	Indicates the **ON** position of a power switch.	√	
	Indicates the **OFF** position of a power switch.	√	
	Indicates pinch point.	√	
	Indicates a protective grounding terminal that must be connected to earth ground before any other electrical connections are made to the product.		√
	Indicates the presence of an electrical shock hazard and to proceed with appropriate caution.		√
	Indicates that you should consult the manual for further information and to proceed with appropriate caution.		√
	Indicates an external ground stud that is required for use when the AC power cable is not connected to a protective earth ground outlet in your operating room or facility.		√
	Indicates this equipment is an applied part, TYPE B in accordance with IEC 60601-1 and is generally suitable for applications involving external or internal contact with the patient, excluding the heart. The patient circuit is connected to protective earth and this equipment should be connected only to outlets with a protective earth ground.		√
	Indicates Waste Disposal information.		√

Product Safety Certifications

The Axis Jackson System has been independently tested and verified to comply with the applicable sections of the following:

IEC 60601-1 Medical Electrical Equipment, Part 1: General Requirements for Basic Safety and Essential Performance.

IEC 60601-1-2 Medical Electrical Equipment, Part 1-2: General Requirements for Safety – Collateral Standard: Electromagnetic Compatibility – Requirements and Tests.

IEC 60601-2-46 Medical Electrical Equipment – Part 2: Particular Requirements for Safety – Specification for Operating Tables.

UL60601-1 UL Standard for Safety for Medical Electrical Equipment, Part 1: General Requirements for Safety.

CAN/CSA C22.2 NO. 601.1-M90 Medical Electrical Equipment - Part 1: General Requirements for Requirements for Safety.

JIS0601-1 Medical Electrical Equipment, Part 1: General Requirements for Safety.

93/42/EEC Medical Device Directive.

IEC 60529 Degrees of Protection Provided by Enclosures (IP Code).

General Product Setup and Use Precautions

⚠ WARNING Servicing of the Axis Jackson System is to be performed only by Mizuho OSI Factory authorized personnel. Failure to comply with this requirement may result in damage to the product, and injury or death of personnel.

⚠ CAUTION This equipment is an applied part, TYPE B, in accordance with IEC 60601-1 and is generally suitable for applications involving external or internal contact with the patient, excluding the heart. The patient circuit is connected to protective earth and this equipment should be connected only to outlets with a protective earth ground.

WARNING An external ground stud is required for use when the AC power cable is not connected to a protective earth ground outlet in your operating room or facility. To protect the patient and hospital staff from any possible hazards, an external ground wire connection is required between the external ground stud and protective earth ground. Failure to comply with this requirement may result in damage to the product, and injury or death of personnel.

IMPORTANT: Medical electrical equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in this manual.

IMPORTANT: Portable and mobile RF communications equipment can affect medical electrical equipment.

IMPORTANT: This equipment should not be stacked with other equipment. The equipment should be observed to verify normal operation in the configuration in which it will be used.

IMPORTANT: The use of accessories, transducers and cables that are not specified by Mizuho OSI, may result in increased electrical/electronic signal emissions and/or decreased electronic/electrical signal immunity which may affect the proper operation of the equipment.

Note: To be in compliance with the European WEEE Directive, all electrical components, batteries and carbon composite components that must be disposed shall either be returned directly to Mizuho OSI or to a Mizuho OSI specified disposal facility for proper disposal. Please contact Mizuho OSI Customer Resources Department at 1-800-777-4674 for further information regarding this requirement.

2.0 INTRODUCTION

General Description

The Mizuho OSI Axis Jackson System®, Model 6977, in conjunction with the Mizuho OSI Advanced Control Modular Table Base, Model 5803 is a patient positioning surgical support system for thoracic and lumbar spine procedures that provides for a wide range of intra-operative angular movement.

The Axis Jackson System can be set-up for prone, supine and lateral patient positioning and is designed to articulate the patient intra-operatively in flexion and extension, replicating the natural movement of the spine.

The Axis Jackson Hinged Frame is designed to only be mounted on the Mizuho OSI 5803 Advanced Control Modular Table Base. The modular base Hand Pendant controls the Trendelenburg, Reverse Trendelenburg, and table top height adjustments. The Hand Pendant for the Axis Jackson controls the table top's Hinge movement and Lateral Roll.

The Axis Jackson System incorporates an Advance Control Pad System (ACP) which supports a patient in the prone position. The pad system is electronically controlled and pneumatically actuated, providing massage action and periodic pressure point stimulation through the Bilateral Winged ACP Chest Pad and the Contoured Combination ACP Hip / Thigh Pads.

Specifications

Hinged Frame 80" (203 cm) Total Length	Hinged Frame Head-End 33" (84 cm) length
	Hinged Frame Foot-End 47" (119 cm) length
Hinged Frame Width	Hinged Frame Head-End 19" (48 cm) width
	Hinged Frame Foot-End 19" (48 cm) width
Two Piece Supine Top Length	Head-End 30" (76 cm) length
	Foot-End 43" (109 cm) length
Supine Top Width	Head-End 21" (53 cm) width
	Foot-End 21" (53 cm) width
Table Articulations	-20° (± 2°) Hinge Down +35° (± 2°) Hinge Up 12° (± 2°) Lateral Roll
Table Top Height Range	24" – 39" (61 cm - 99cm) measured at the Head-End of the table frame
Patient Weight Capacity	500 lb (227 kg) maximum
Power Requirements	6977: 100-230 VAC at 50/60 Hz, 9 Amps max.
Duty Cycle of Hinged Frame	10%, (6 minutes continuously per hour)

Product Acceptance

Upon receipt of your Axis Jackson System, remove each component from its shipping crate or packaging. Visually inspect all surfaces for freight damage.

Note: Any freight damage must be reported to the freight carrier immediately upon delivery. It is the responsibility of the recipient to make freight damage claims.

Glossary of Terms

Foot Elevator, Down	A downward motion of the Hinged Frame Foot-End. The Hinge angle remains neutral.
Foot Elevator, Up	An upward motion of the Hinged Frame Foot-End. The Hinge angle remains neutral. The Foot-End of the frame does not raise above neutral.
Foot-End Table Top	The section of the Hinged Frame where the Removable Foot Board is attached.
Head-End Table Top	The section of the Hinged Frame where the Torso Trolley™ mounts.
Height Down	Both Columns of the modular base lower simultaneously to lower the table top.
Height Up	Both Columns of the modular base raise simultaneously to raise the table top.
Hinge Down	The Hinge of the frame moves downward. The Foot elevator moves upward.
Hinge Up	The Hinge of the frame moves upward. The Foot Elevator moves downward.
Lateral Roll, Left	A counter-clockwise motion of the table top about its longitudinal axis, as viewed from the Head-End Column.
Lateral Roll, Right	A clockwise motion of the table top about its longitudinal axis, as viewed from the Head-End Column.
Left Side of Table Top	The left side of the table top, as viewed when standing at the Head-End Column facing the Foot-End Column.
Return to Home	The Hinged Frame returns to level side to side and the Hinge and Foot Elevator return to neutral positions.
Reverse Trendelenburg	A position of the table top and the patient, with the Foot-End lower than the Head-End. On the modular base, the Head-End Column raises and the Foot-End Column lowers simultaneously. If the table is in a fully raised position, only the Foot-End will lower to achieve the proper Reverse Trendelenburg angle.
Right Side of Table Top	The right side of the table top, as viewed when standing at the Head-End Column facing the Foot-End Column.

Trendelenburg	A position of the table top and the patient, with the Head-End lower than the Foot-End. On the modular base, the Foot-End Column raises and the Head-End Column lowers simultaneously. If the table is in a fully lowered position, only the Foot-End will raise to achieve the desired Trendelenburg angle.
V Hinge Down	Only the Hinge of the frame moves downward.
V Hinge Up	Only the Hinge of the frame moves upward.

3.0 SYSTEM COMPONENTS

The main components of the Axis Jackson System are shown in Figures 1 and 2.

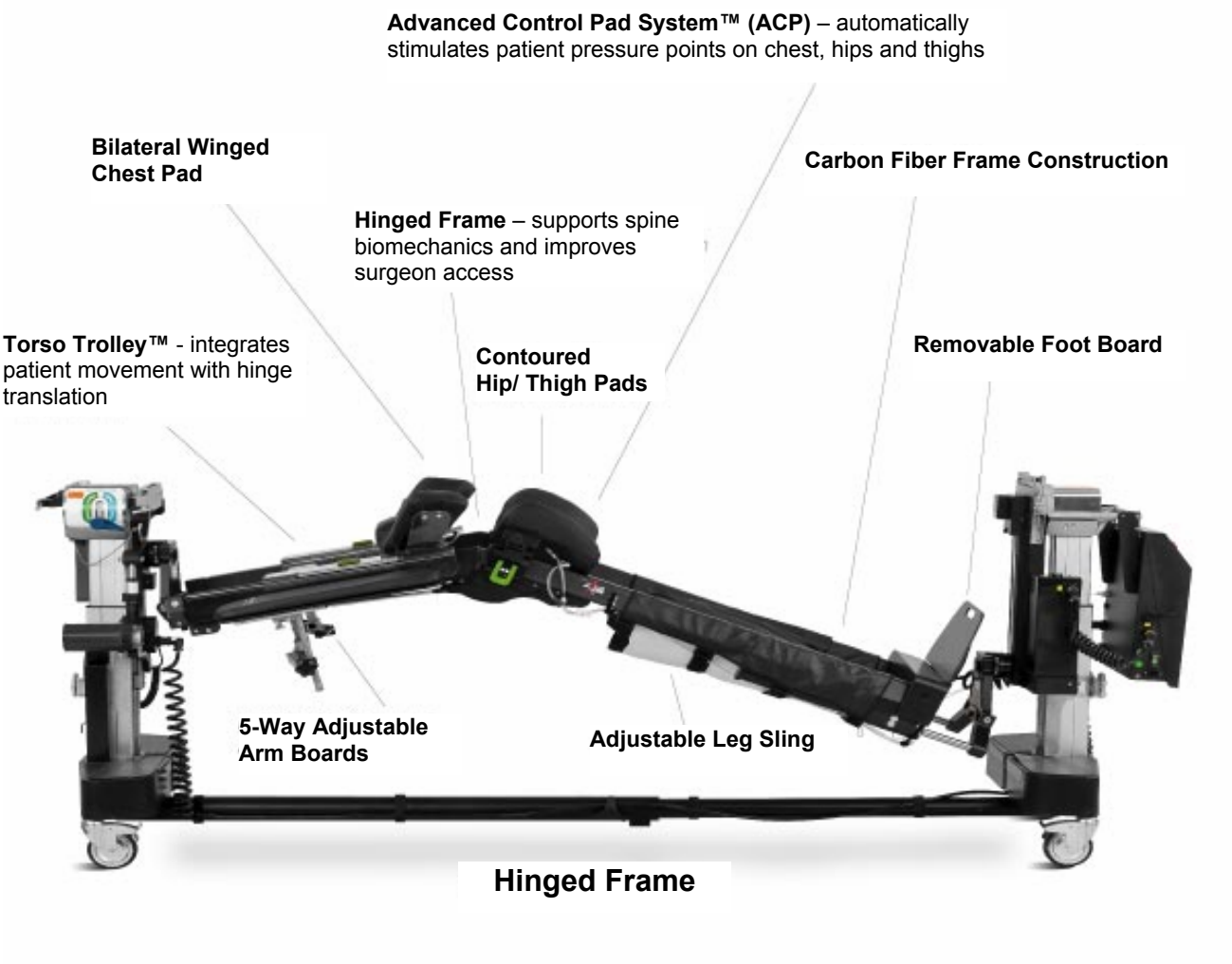

Advanced Control Pad System™ (ACP) – automatically stimulates patient pressure points on chest, hips and thighs
Bilateral Winged Chest Pad
Carbon Fiber Frame Construction
Hinged Frame – supports spine biomechanics and improves surgeon access
Torso Trolley™ - integrates patient movement with hinge translation
Contoured Hip/ Thigh Pads
Removable Foot Board
5-Way Adjustable Arm Boards
Adjustable Leg Sling
Hinged Frame

Figure 1: Axis Jackson System
6977 Axis Jackson Hinged Frame with 5803 Advanced Control Modular Base

Hinge Angle Plus 35°
Prone and Supine Table Tops – mount on dual column 5803 Advanced Control Base
Axis Jackson™ System Controller - controls hinged frame
Tempur-Med® 2-in, Table Pad with Translation Slide
Carbon Fiber Removable Two Piece Imaging Top
Two Piece Supine Top

Figure 2: Axis Jackson System
6977 Axis Jackson Hinged Frame w/Two-Piece Supine Top and 5803 Advanced Control Modular Base

Head-End and Foot-End Column Sliders

The Axis Jackson System cannot be used without first installing both the Head-End and Foot-End Column Sliders. The Column Sliders (P/N 6977-640 & 6977-641) are key structural components of the system. The Column Sliders mount on the 5803 Advanced Control Base Head-End and Foot-End Columns.

Head-End Support Assembly

The Head-End Support Assembly (P/N 6977-601) attaches to the Head-End Column Slider and provides structural support for the Hinged Frame.

Foot-End Support Assembly

The Foot-End Support Assembly (P/N 6977-600) attaches to the Foot-End Column Slider and provides structural support for the Hinged Frame.

Hinged Frame

The Hinged Frame (P/N 6977-100) is the primary structural member of the Axis Jackson. It directly supports the patient weight while articulating about the Hinge point just above the patient's hips. The frame is constructed of carbon fiber tube elements with aluminum Hinge and end fittings, and it includes a length-compensation element to handle the foreshortening of the frame when it is flexed. The Hinge drive motor is incorporated into the Hinged Frame.

Axis Jackson Controller with Cable Set

The Controller (P/N 6977-4005) supplies power to the various components of the Axis Jackson System. The table top On/Off switch is located on the Controller. The Controller also includes the air pump and controls for the Advance Control Pad System (ACP).

Hand Pendant with Junction Box

The Axis Jackson Hand Pendant (P/N 6807-5) mounts in the Holster (P/N 6977-4162) with the 5803 Advanced Control Base Hand Pendant and should be hung on the Head-End Column of the base for easy access. It is used to manipulate the Hinge of the frame up and down as well as control Lateral Roll of the Hinged Frame.

Two-Piece Supine Imaging Top

The Two-Piece Supine Top (P/N 6977-955 and P/N 6977-956) is of carbon fiber construction and mounts above and below the Hinge of the frame to allow for articulation of the Hinge when the patient is positioned in the supine or lateral position.

A 2" (5 cm) MIZUHO OSI Tempur-Pedic® pad (P/N 6977-7000) is provided for use with the Two-Piece Supine Imaging Top. The TEMPUR® used in the manufacture of MIZUHO OSI pads has viscoelastic properties and is a temperature sensitive material, becoming softer where the patient's body is making the most contact with the surface and remaining firm in areas where less body contact is being made. Pressure is distributed evenly over the entire surface area. The pad is radiolucent, MR safe and latex free. The benefits of using MIZUHO OSI Tempur-Pedic are improved pressure management, reduced shear forces and enhanced patient comfort.

The Supine Top Translation Sheet (P/N 6977-927) interfaces with the Supine Top and Tempur-med® Pad to allow support and movement.

4.0 AXIS JACKSON SYSTEM SET-UP

IMPORTANT: It is recommended that two people work together when installing or uninstalling the system components.

Note: If you have purchased a 6977 Axis Jackson System already mounted on a 5803 Advanced Control Base at the factory, the base has been prepared and the frame mounted. It remains important, however, that Section 4.0 Axis Jackson System Set-Up be read to form an understanding about how the applicable components are installed and function.

The Mizuho OSI Axis Jackson System is designed to only mount and be utilized on the 5803 Advanced Control Modular Table Base.

Note: For complete instructions on the 5803 Advanced Control Modular Table Base operation and functions, please refer to the Owner's Manual supplied with the Advanced Control Modular Table Base (P/N NW0498). A thorough understanding of the operation of the 5803 Advanced Control Base is required before continuing.

Preparing the 5803 Advanced Control Base for Mounting 6977 Axis Jackson System

Complete the following steps prior to mounting the Axis Jackson® Hinged Frame

1. Move and position the 5803 Advanced Control Base where it will be used.
2. Ensure the retractable I beam is fully extended and locked in place

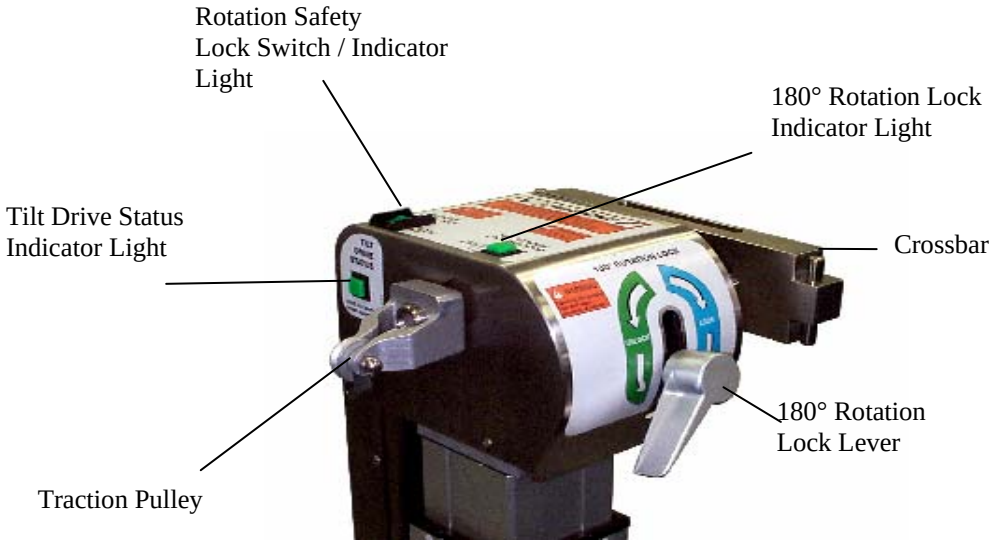


Figure 3A: Indicator Lights on the Head-End Column of 5803 Advanced Control Base

3. Lock all 4 caster locks on the base

4. Verify the Head-End and Foot-End crossbars are level, that the Rotation Safety Lock Switch is in the ON position, and the 180 degree Rotation Lock Lever is in the locked position. All three indicator lights on the Head-End Column must be lit (the 180° Rotation Lock Indicator light, the Tilt Drive Status light and the Rotation Safety Indicator light).
5. Using a hex wrench, remove the H-frame storage brackets which are mounted on the base of both the Head-End Column and the Foot-End Column of the 5803 Base. This is required to allow for installation of the Column Sliders (P/N 6977-640, 6977-641). The H-frame storage brackets can be re-attached should you desire when not utilizing the Axis Jackson System
6. Where the brackets were removed, install the Table Base Joint Cover (P/N 6977-853) and the H-Frame Hangar Bracket (P/N 6977-852) provided in the Axis Jackson Conversion Kit (P/N 6977-850). Also provided in the kit is the Cable Attachment Post (P/N 6977-209) and mounting hardware, install at the foot end of the 5803 base, location as shown in 3B below.

Figure 3B

Installing the Column Sliders

To attach the Column Sliders to the Head-End and Foot-End Columns of the 5803 base, complete the following steps:

1. Ensure the base has been prepared for mounting the Axis Jackson as instructed in the previous section.
2. Ensure all 3 indicator lights on the Head-End Column are illuminated. If not, refer to the 5803 Advance Control Base Owner's Manual and complete the steps required.
3. Depress the Height Up button on the 5803 Base Hand Pendant and raise the Columns of the base to half-way in their height range
4. Unlatch the Head-End Column Slider and slide between the quiver and the Column. The Column Slider will rest on the foot of the modular base. Enclose the Column with the Slider, latch and tighten the knob.
5. Unlatch the Foot-End Column Slider and slide between the quiver and the Foot-End Column. The Column Slider will rest on the foot of the modular base. Enclose the Column with the Slider, latch and tighten the knob.

6. When installed correctly, the labels on the Column Sliders will be legible as shown below.

Figure 4: Installing the Column Sliders

Installing the Head-End Support Assembly

To install the Head-End Support Assembly, complete the following steps:

1. Lift the Head-End Support Assembly's catch mechanism up under the Head-End Column crossbar.
2. Align the catch with the dowel pins on the cross bar and install a T-pin (P/N 5840-361) to secure it in place.
3. To attach the Head-End Support Assembly to the Head-End Column Slider, slide the latch mechanism to engage the pin on the back side of the assembly. An audible "click" confirms the latch mechanism is secured in place.

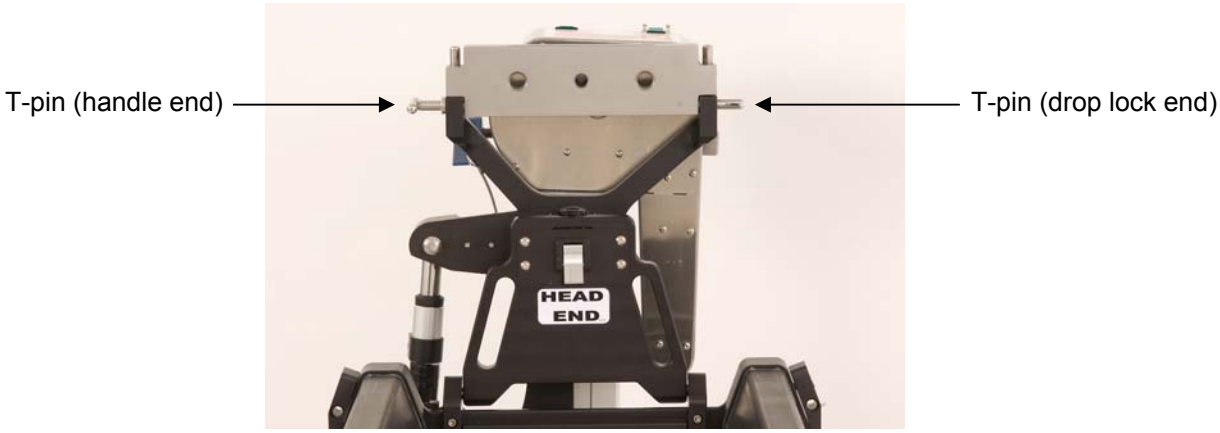


Figure 5: Installing the Head-End Support Assembly

WARNING Verify that the T-pin is inserted and passes completely through the Head-End Support Assembly and Crossbar. Verify the T-pin drop lock is in sight and pivots freely (see Figure 5 illustration). Failure to do so may result in the patient and table assembly being dropped and may result in serious injury to the patient and others.

WARNING Failure to follow the prescribed procedures for securing the Head-End Support Assembly to the Crossbar, may result in the patient and table assembly being dropped and may result in serious injury to the patient and others.

Installing the Head Lock-Out Clamp

When mounting the Axis Jackson System, the Head-End Lock-out Clamp (P/N 6977-830) is required to be installed. The clamp prevents the sliding movement of the Head-End Column of the 5803 Base which is allowed when other modular tops are utilized.

1. Verify that the 4 caster locks on the 5803 Advanced Control Base are locked in position.
2. Standing at the Head-End of the base, pull the top of the Head-End Column toward you and away from the center of the base.
3. Align the pins on the top of the Clamp (P/N 6977-830) with the holes under the top of the Head-End Column. The label on the top of the clamp should be facing outward.
4. Pinch the clamp lever-arms and allow the jaws of the Clamp to grab the underside of the Head-End Column. When properly positioned, release the clamp lever arms and the clamp will seat itself. The red label should not be visible.
5. Confirm the Clamp is installed correctly:
   a) Pull on the lanyard with moderate force (5-10 lbs/2.5 – 5 kg) – the Clamp should remain in place.
   b) Attempt to move the Head-End Column forward and backward - no motion should be detected.

   If the red label is visible, the Clamp did not remain in place, and/or motion in the Head-End Column is detected, remove the Clamp and re-install following steps 1-5.

Figure 6: Installing the Head-End Lock-out Clamp

Installing the Foot-End Support Assembly

IMPORTANT: The Foot-End Column Slider must be installed prior to installing the Foot-End Support Assembly.

To install the Foot-End Support Assembly, two people working together should complete the following steps:

1. Lift the Foot-End Support Assembly and place it onto the table base.
2. Lift and align the catch with the dowel pins on the Foot-End Crossbar and install a T Pin (P/N 5840-361) to secure it in place.
3. To attach the Foot-End Support Assembly to the Foot-End Column Slider, slide the catch mechanism to engage the pin on the back side of the assembly. An audible "click" confirms the latch mechanism is secured in place.

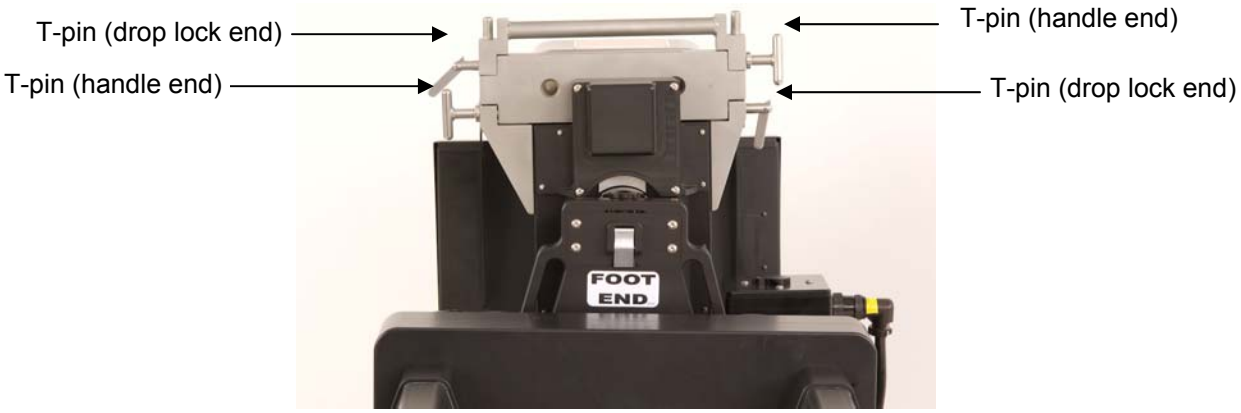


Figure 7: Installing the Foot-End Support Assembly

WARNING Verify that the T-pin is inserted and passes completely through the Foot-End Support Assembly and Crossbar. Verify the T-pin drop lock is in sight and pivots freely (see Figure 7 illustration). Failure to do so may result in the patient and table assembly being dropped and may result in serious injury to the patient and others.

WARNING Failure to follow the prescribed procedures for securing the Foot-End Support Assembly to the Crossbar, may result in the patient and table assembly being dropped and may result in serious injury to the patient and others.

Axis Jackson® System Hinged Frame Installation Cart

Mounting the Hinged Frame on the 5803 Advanced Control Base for Use

WARNING The Installation Cart is not intended for patient transport.

WARNING The Hinged Frame should not be utilized for patient positioning when in place on the Installation Cart.

CAUTION Avoid using this product in a manner not specified by Mizuho OSI.

IMPORTANT: It is recommended that two people work together when using the Installation Cart with the Hinged Frame.

CAUTION Always keep body parts, hands, fingers, etc. clear of moving parts and pinch points when completing this procedure.

5803 Base Preparation:

Prior to mounting the Hinged Frame on the 5803 Advanced Control Base, complete the steps outlined previously in this manual to prepare the base. i.e. install the Column Sliders, Head-End Support and Foot-End Support Assemblies.

Lock the (4) caster locks of the Advanced Control Base.

Move columns of the base to maximum height up:

- On the 5803 Hand Pendant depress and hold the Height Up button until the columns of the Base travel to full extent of travel.

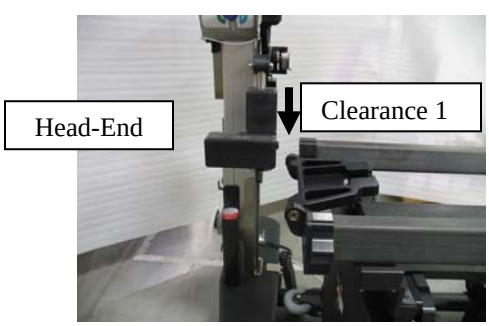
Installation Cart Positioning:

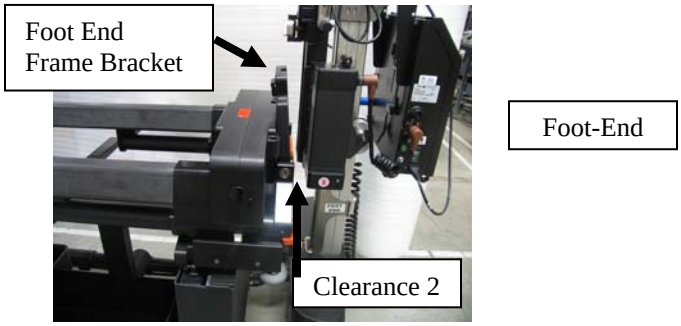
Maneuver the Installation Cart (Cart) next to and parallel to the 5803 base (Base) by placing it into a position between the columns on the Rotation Lock (blue handle) side of the Head-End column.

- Cart labels Head-End and Foot-End should align with the orientation of the columns.
- Cart should remain parallel to the Base as it is rolled into position.
- Roll the Cart into its final position: the Bumper on the Foot-End of the Cart must be in contact with the Foot-End of the Base and the two caster guards in contact the 5803's center beam as shown. Note the Head-End bumper, not shown, does not contact the base.

Lock the (2) caster locks of the Installation Cart.

Prior to moving the Cart Slider into position between the columns of the Base ensure the Hinged Frame is centered (has clearance) between the Foot and Head-End Support Assemblies.





Clearance 1 can be easily adjusted by sliding the Hinged Frame toward the Foot-End. Note increasing clearance 1 causes the Foot-End Frame Bracket to become more vertical.

Move to the opposite side of the base, locate and lift the Release Handle of the Installation Cart and pull the Cart Slider towards you until it reaches its full extent of travel.

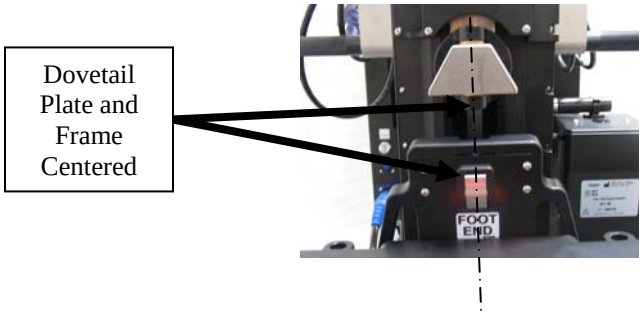
The Cart Slider should lock in place when the Release Handle returns to its neutral position.

IMPORTANT: THE HINGED FRAME FOOT-END IS ALWAYS "FIRST ON, LAST OFF".

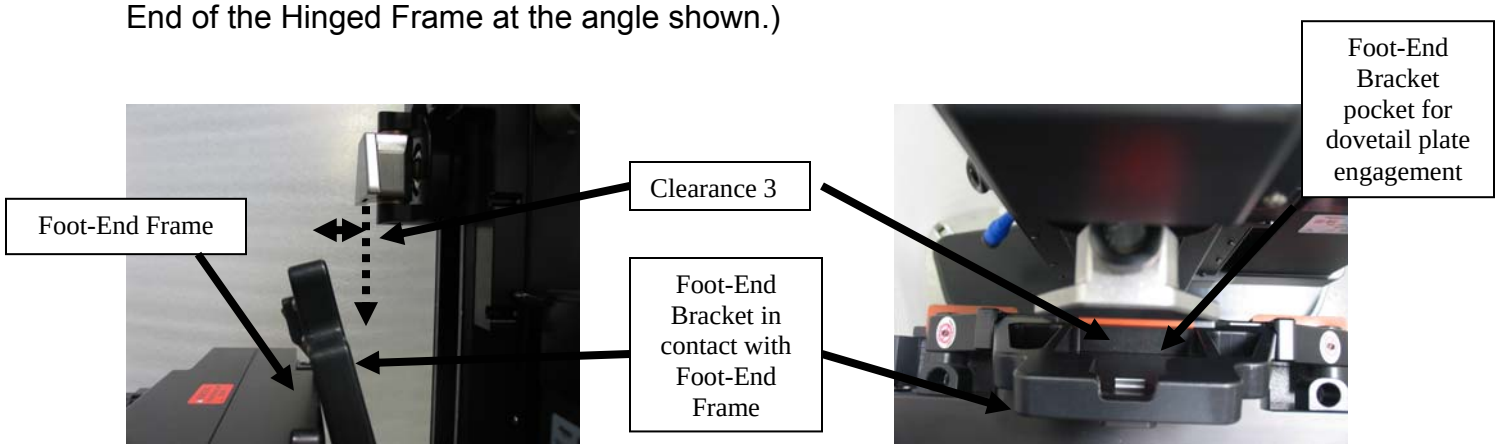
<u>Hinged Frame Foot-End Installation Preparation:</u>

Rotate the dovetail plate to a level position as shown.

Center the Hinged Frame to the dovetail plate as shown. (If necessary, slide the Hinged Frame laterally or toward the Head-End or Foot-End as needed to center the frame between the Head-End and Foot-End Support Assemblies. There is some lateral free play in the Cart Slider to assist in centering.



Adjust frame until the Foot-End Bracket has sufficient clearance to mate with the dovetail plate as shown. (Typically, when the Foot-End Bracket just touches the Foot-End of the Hinged Frame at the angle shown.)


Foot-End Bracket pocket for dovetail plate engagement
Foot-End Frame
Clearance 3
Foot-End Bracket in contact with Foot-End Frame

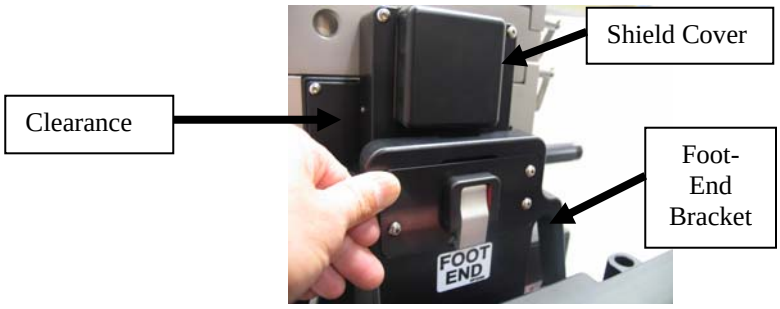
CAUTION Always keep body parts, hands, fingers, etc. clear of moving parts and pinch points when completing this procedure.

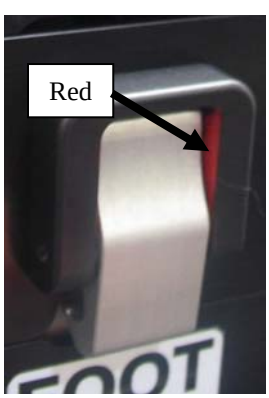
Install the Hinged Frame onto the Foot-End Support Assembly:

Utilizing the 5803 Hand Pendant:

- Use a second person to observe the Foot-End of the Hinged Frame, ensuring there is adequate clearance for the moving parts.
  - If there is an interference between parts, return the column to its full height up position. After motion has stopped adjust the Hinged Frame and dovetail plate as needed to obtain adequate clearance. It may be necessary to slide the frame toward the Head-End Column in order to angle the Foot-End Bracket away from the Foot-End Support Assembly.
- Depress and hold the Reverse-Trendelenburg button, to lower the Foot-End Column until dovetail plate is aligned with pocket in the Foot-End Bracket.

- Adjust the dovetail plate using Reverse Trendelenburg and/or Height Up buttons until the top of the Foot-End Bracket is just below the shield cover.





Frame Latch
DISENGAGED POSITION
NOTE- VISIBLE RED COLOR

Frame Latch
(silver button)

Frame Latch
ENGAGED POSITION
NOTE- RED COLOR IS COVERED BY LATCH

- Press the Foot-End Bracket against the dovetail plate until the Latch is FULLY DISENGAGED, as shown above.
- Depress Height Up so the dovetail plate of the Foot-End Support Assembly latches into the Foot-End Bracket of the Hinged Frame.

IMPORTANT: if the Foot-End of the Frame begins to lift off the Cart Slider before the Frame Latch is FULLY ENGAGED, STOP MOTION.

Use the Reverse Trendelenburg and Height Up buttons to adjust the dovetail plate height, realign the frame to the pivot block and repeat the process indicated above.

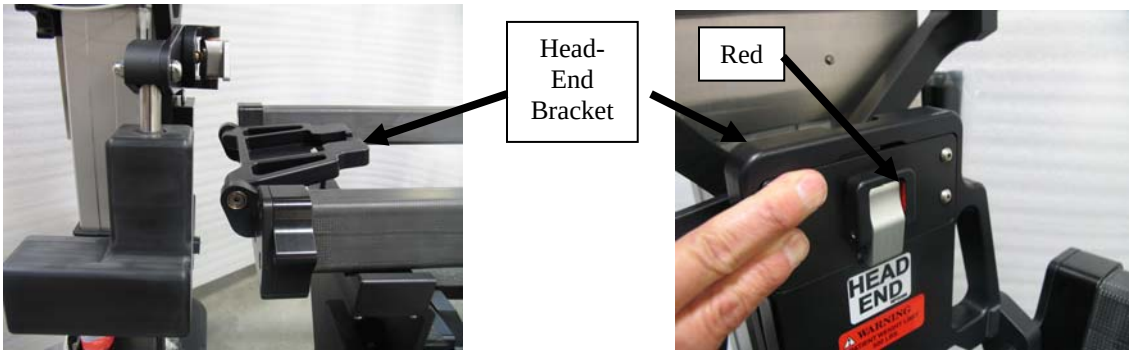
- When the Latch is fully engaged the Foot-End of the Hinged Frame can be raised off the Cart Slider by depressing and holding the Height Up button
- Depress the Height Up button to raise the Foot-End Column to its full extent of travel.

Install the Hinged Frame onto the Head End Support Assembly:

Rotate the Head-End Bracket of the hinged frame toward the hinge.

Utilizing the 5803 Hand Pendant:

- Lower the Head-End dovetail plate by depressing and holding the Trendelenburg button until it is approximately 2.5 “(6cm) above the Head-End Bracket.
- Raise the Head-End Bracket to engage the dovetail plate and press the Head-End Bracket against the dovetail plate until the Latch is FULLY DISENGAGED, as shown below. (See above for description of fully disengaged Latch.) If the Latch is not fully disengaged, then use Trendelenburg or Height Up buttons to readjust the dovetail plate height until the Latch is fully disengaged. It may be necessary to slide the Head-End of the frame laterally toward the Foot-End in order to align the Head-End Bracket with the dovetail plate.



- When properly aligned depress Height Up button so the dovetail plate of the Head-End Support Assembly latches into the Head-End Bracket of the Hinged Frame. The Head-End of the Hinged Frame can now be raised off the Cart Slider by depressing the Height Up button.

IMPORTANT: **If the Head-End of the frame begins to lift off the Cart Slider before the Frame Latch is FULLY ENGAGED, STOP MOTION.**

Use the Trendelenburg and Height Up buttons to adjust the dovetail plate height, realign the frame to the pivot block and repeat the process indicated above.

- Depress and hold the Height Up button raising the Foot-End Column to its full extent of travel.

The Hinged Frame should now be fully supported by the Head-End and Foot-End Columns of the base and positioned at its maximum height with the Head-End and Foot-End Latches fully engaged.

Remove Installation Cart:

Prior to retracting the Cart Slider, be sure there is clearance between the Cart Slider and the hinged frame.

- Lift the Release Handle of the Installation Cart and push the Cart Slider over into its stored position.
- An audible click will be heard confirming the Cart Slider is locked in the stored position. Manually test the Cart Slider top to ensure it is securely locked into position at both ends of the cart.
- Unlock the (2) caster locks of the Installation Cart and move away from the base.

Continue the installation procedure by following the steps in "Connecting the Axis Jackson® Controller and the Hinged Frame"

Removing the Hinged Frame from the 5803 Advanced Control Base for Storage

WARNING The Installation Cart is not intended for patient transport.

WARNING The Hinged Frame should not be utilized for patient positioning when in place on the Installation Cart.

CAUTION Avoid using this product in a manner not specified by Mizuho OSI.

IMPORTANT: It is recommended that two people work together when using the Installation Cart with the Hinged Frame

CAUTION Always keep body parts, hands, fingers, etc. clear of moving parts and pinch points when completing this procedure.

Lock the (4) caster locks of the 5803 Advanced Control Base.

Ensure all components have been removed from the Hinged Frame and are stored on the Component Cart prior to removing the Hinged Frame.

Confirm the Hinged Frame is in the neutral "HOME" position by checking the 6977 Hand Pendant, the display should read +00 and the 3 LED's should be lit. If necessary, utilize the Hand Pendant "Return to Home" button to return the Hinged Frame to the neutral "HOME" position and the display reads +00.

Raise frame: (to maximum height by utilizing the 5803 Hand Pendant)

- Depress and hold the Height Up button until the columns of the base travel to full extent of travel.

Remove Cables:

- Disconnect the Blue, White and Brown cables from the Hinged Frame, Controller, Head-End Support Assembly and Foot-End Support Assembly. Place in the storage area on the Installation Cart.

Installation Cart Positioning:

Maneuver the Installation Cart (Cart) next to and parallel to the 5803 base (Base) by placing it into a position between the columns on the Rotation Lock (blue handle) side of the Head-End column.

- Cart labels Head-End and Foot-End should align with the orientation of the columns.
- Cart should remain parallel to the Base as it is rolled into position.
- Roll the Cart into its final position: the Bumper on the Foot-End of the Cart must be in contact with the Foot-End of the Base and the two caster guards in contact the 5803's center beam as shown. Note the Head-End bumper, not shown, does not contact the base.

Lock the (2) caster locks of the Installation Cart.

Remove the Hinged Frame from the Head-End Support Assembly:

Utilizing the 5803 Hand Pendant:

Depress and hold the Trendelenburg button, simultaneously a second person should depress the silver button on the Head-End Bracket of the frame. These actions will result in lowering the Head-End Column of the base and allowing the Head-End of the Hinged Frame to be released from the Head-End Support Assembly and rest on the Cart Slider.

Hold the Head-End Bracket of the Hinged Frame away from the dovetail support of the Head-End Support Assembly, simultaneously depress and hold the Height Up button raising the Head-End Column to its extent of travel.

Remove the Hinged Frame from the Foot-End Support Assembly:

Utilizing the 5803 Hand Pendant:

Depress and hold the Reverse Trendelenburg button, simultaneously a second person should depress the silver button on the Foot-End Bracket of the frame. These actions will result in lowering the Foot-End Column of the base and allowing the Foot-End of the Hinged Frame to be released and rest on the Cart Slider.

Hold the Foot-End Bracket of the Hinged Frame away from the dovetail plate support of the Foot-End Support Assembly, simultaneously depress and hold the Height Up button raising the Foot-End Column to its extent of travel.

The Hinged Frame should now be fully supported on the Cart Slider of the Installation Cart.

Remove Installation Cart:

Prior to retracting the Cart Slider, be sure there is clearance between the Cart Slider and the hinged frame.

- Locate and lift the Release Handle of the Installation Cart and push the Cart Slider with Hinged Frame over into its stored position.
- An audible click will be heard confirming the Cart Slider is locked in the stored position. Manually test the Cart Slider top to ensure it is securely locked into position at both ends of the cart.
- Unlock the (2) caster locks of the Installation Cart and move away from the base.

Remove Components from Base:

Remove the Axis Jackson Controller, Foot-End Support Assembly, Head-End Support Assembly and Column Sliders and store in the appropriate area on the cart.

Cover Installation Cart:

Cover the Installation Cart with the dust cover provided and move to the storage location.

Connecting the Axis Jackson Controller and the Hinged Frame

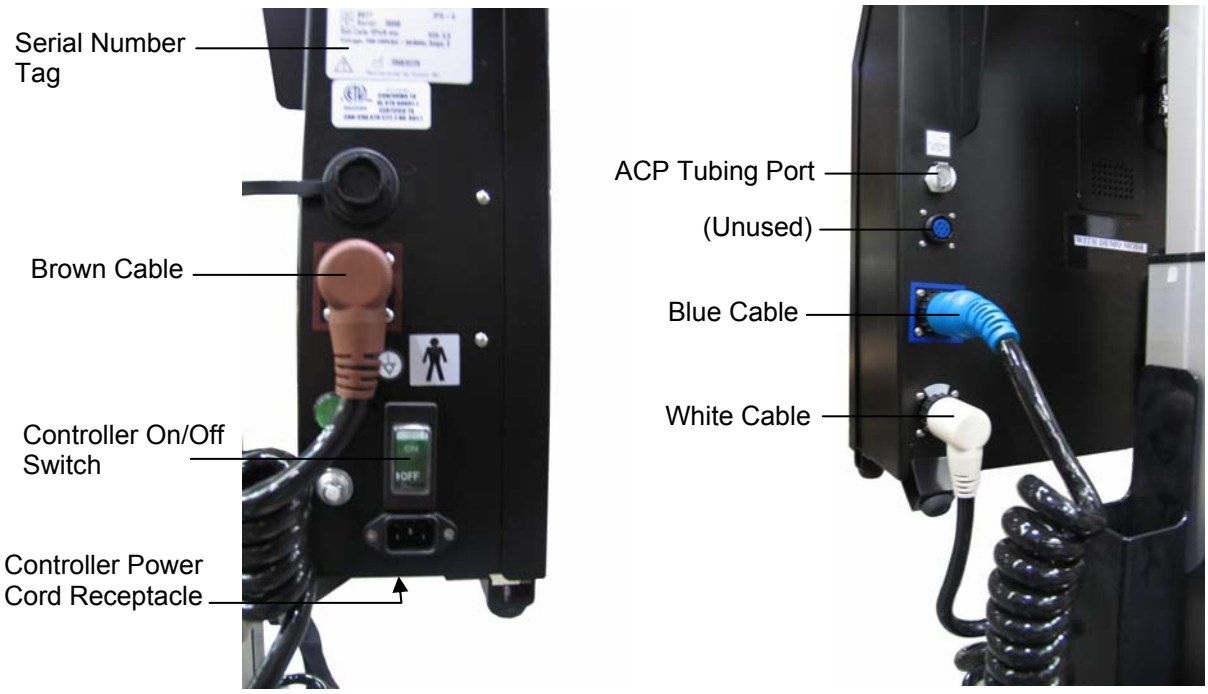


Figure 8a and 8b: Controller Cable Connections

To connect the Controller:

1. Mount the Axis Jackson Controller on the Foot-End Column by sliding the handle over the top of the Column crossbar.
2. Secure by inserting a T-pin through the mounting handle and crossbar.
3. Prior to connecting the Controller: run the Cable (P/N 6977-4110, color coded white) under the Foot-End Column between the wheels. Wrap the Cable around the I-beam of the base and secure with attached Velcro™ straps. The Cable should be secured to the beam so it does not contact the floor if the base needs to be moved. Connect the Head-End Frame Support Assembly 90 degree end of the Cable to the Head-End Support Assembly and the other end of the Cable color coded white to the corresponding white labeled port on the Controller.
4. Connect the Foot-Elevator Cable (P/N 6977-4140, color coded brown) to the Foot-End Support Assembly and the corresponding color coded brown labeled port on the Controller.
5. Connect the Hinged Frame Cable (P/N 6977-4130, color coded blue) to the Hinged Frame and the corresponding color coded blue labeled port on the Controller.
6. Connect the Axis Jackson Controller power cord to the Controller and to an electrical outlet.

⚠CAUTION An external ground stud is required for use when the AC power cable is not connected to a protective earth ground outlet in your operating room or facility. To protect the patient and hospital staff from any possible hazards, an external ground wire connection is required between the external ground stud and protective earth ground. Failure to comply with this requirement may result in damage to the product, and injury or death of personnel.

7. If the electrical outlet being utilized is not grounded, connect the external ground stud to a protective earth ground.

Hand Pendant with Junction Box (P/N 6807-5)

1. To connect the Axis Jackson Hand Pendant, plug the long cable extending from the Junction Box on the Hand Pendant into the port on the Head-End Support Assembly.
2. Connect the short lead from the Junction Box to the 5803 Head-End Column Hand Pendant port.
3. Connect the 5803 Hand Pendant to the remaining receptacle on the Junction Box.

5803 Base Hand Pendant and 6977 Axis Jackson System Hand Pendant

When the Axis Jackson System is utilized it requires the use of both the 5803 Advanced Control Base Hand Pendant and the 6977 Axis Jackson Hand Pendant. The two Hand Pendants are intended to be placed in the Holster (P/N 6977-4162) provided with the Axis System for easy access and simultaneous use. The 5803 Hand Pendant controls table top height adjustment, Trendelenburg and Reverse Trendelenburg positions. The 6977 Hand Pendant controls the Hinged Frame movement, Foot Elevator and Lateral Roll.

Figure 9: The 6977 Axis Jackson Hand Pendant and 5803 Advanced Control Hand Pendant (Shown mounted in Holster)

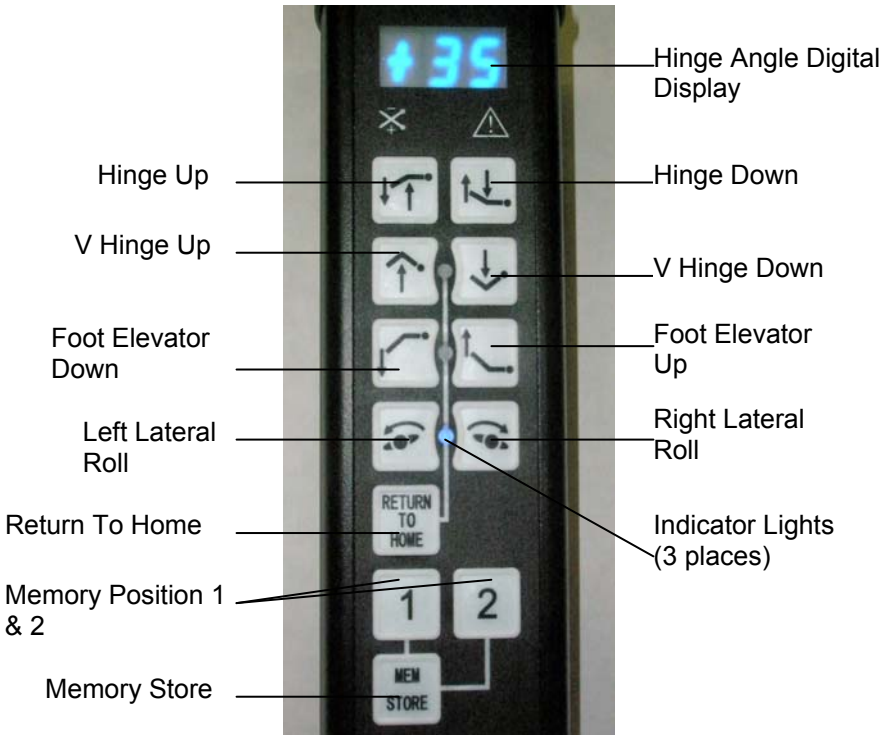


Figure 10: The Axis Jackson Hand Pendant

Axis Jackson Hand Pendant Operation

To control the angle of the Hinge and transition from a neutral or 00° position up to +35° Hinge up or -20° Hinge down, depress the appropriate button on the Hand Pendant. The selected function will continue to operate until the button is released or the Hinged Frame has reached the extent of its travel. The angle of the Hinge is displayed on the digital display. The readout will display +00 when the Hinge is in the neutral position and the table top is level.

To raise the Hinge and lower the Foot-End of the table top simultaneously, depress the Hinge Up button (on the left side of the control with the arrows that point up in the middle and down at the foot).

To lower the Hinge, depress the Hinge Down button (on the right side of the control with the arrows that point down in the middle and up at the foot).

To raise the Hinge only without lowering the Foot-End of the table top, depress the V Hinge Up button (on the left side of the control, with the arrow that points up in the middle).

To lower the Hinge only, depress the V Hinge Down button (on the right side of the control with the arrow that points down in the middle).

To lower the Foot-End of the table top, depress the Foot Elevator Down button (on the left side of the control, with the arrow that points down at the foot).

To raise the Foot-End of the table top depress the Foot Elevator Up button (on the right side of the control with the arrow that points up at the foot). The Foot Elevator can only be raised if lower than the neutral or starting position.

To Lateral Roll the table top to the left, depress the Left Lateral Roll button (on the left side of the control).

To Lateral Roll the table top to the right, depress the Right Lateral Roll button (on the right side of the control).

Hinge Position Memory

A Hinge angle position can be stored in memory for ease of returning to the desired position. To save a position in memory, transition the Hinged Frame to the desired position, depress and hold the Memory Store (MEM STORE) button; then depress one of the numbered memory buttons. Continue to depress both buttons until the Indicator Lights on the hand pendant flash, confirming the position is stored in memory.

To transition the frame to a stored position, depress and hold the pre-programmed Memory 1 or Memory 2 button. The table top will transition to the position in memory.

To re-program the position stored as Memory 1 or Memory 2, repeat the above programming process.

NOTE: Lateral Roll, Height, Trendelenburg and Rev Trendelenberg positions can not be saved to Memory 1 or Memory 2.

Hinge Angle Digital Display

The Axis Jackson Hand Pendant displays the position of the Hinge of the frame.

- When the Hinge of the frame is neutral, the table top level, the Hinge angle displayed is 00°.
- When the Hinge is raised, the Hinge angle displayed is +1° to +35°.
- When the Hinge is lowered, the Hinge angle displayed is -1° to -20°.

Should the Hinge angle display read 106 or 107, the Hinged Frame needs recalibration.

Axis Jackson Hinged Frame Calibration Procedure

1. On the Axis Jackson Controller, toggle the main Power Switch to OFF and then to ON.
2. The Hand Pendant will display a number. Once the number is displayed, immediately (within 20 seconds) press and release the Mem Store and Hinge Up buttons simultaneously (the top left and bottom left buttons) once. The system will enter calibration mode and the Hand Pendant display will begin flashing +35.
3. Using the Hand Pendant, press the V Hinge Up button until the Hinge is raised to its extent of travel and stops.
4. Simultaneously press and release the Mem Store and Hinge Up buttons once. The Hand Pendant display will begin flashing +00.
5. Using the Hand Pendant, press the V Hinge Down button until the Hinge lowers to its neutral or level Hinge position.
6. Simultaneously press and release the Mem Store and Hinge Up buttons once. The Hand Pendant display will begin flashing -20.
7. Using the Hand Pendant, press the V Hinge Down button until the Hinge lowers from neutral position to its extent of travel and stops.
8. Simultaneously press and release the Mem Store and Hinge Up buttons once. The Hand Pendant will briefly display +77 to indicate that the calibration was completed successfully. Following the display +77, the Hand Pendant will return to normal use mode and display -20.
9. If the calibration process was unsuccessful, the Hand Pendant will display a blinking error code either 106 or 107.

Repeat Steps 1-8 to re-calibrate. If re-calibration is unsuccessful a second time, contact Technical Service.

LED Indicators

The Axis Jackson Hand Pendant has three Indicator Lights located between the Foot Elevator, Hinge and Lateral Roll buttons.

Foot Elevator Indicator is illuminated when the foot elevator has returned to its home position, level with the Hinge.

Hinge Indicator is illuminated when the Hinge has returned to its neutral, 00° position.

Lateral Roll Indicator is illuminated when the table top is level side to side.

5803 Hand Pendant Operation (see 5803 Owner's Manual for detailed instructions)

Press a button on 5803 Hand Pendant to adjust the table top. The selected function will continue to operate until the button is released or the extent of travel of the Columns is reached.

To raise the table, depress the Height Up button, both Columns raise simultaneously to raise the height of the table top

To lower the table, depress the Height Down button, both Columns lower simultaneously to lower the height of the table top.

To move the table top into a Trendelenburg position, depress the Trendelenburg button until the desired angle is reached. This function lowers the Head-End Column of the base and raises the Foot-End Column base simultaneously.

To move the table top into a reverse Trendelenburg position, depress the Reverse Trendelenburg button until the desired angle is achieved. This function raises the Head-End Column and lowers the Foot-End Column of the base simultaneously.

Note: The Lateral Roll/Tilt buttons on the 5803 Hand Pendant are inoperable when the Axis Jackson System is installed. Lateral Roll is provided and controlled through the 6977 Axis Jackson System Hand Pendant.

5.0 PRE-OPERATION FUNCTION CHECKS

Checking the Advanced Control Base

- ☐ Perform all the steps in this procedure to verify correct base operation.
- ☐ Ensure the 5803 Hand Pendant cable is securely plugged into the 6977 Hand Pendant Junction Box.
- ☐ Ensure the base power cord is connected to a hospital grade power outlet and toggle the main on/off power switch to ON. Verify the switch illuminates; this indicates power is applied to the modular base.
- ☐ Verify the Hand Pendant battery status indicator is lit, and fault indicator is not lit.
- ☐ Press and hold the Hand Pendant Height Up button. Verify the table moves up.
- ☐ Press and hold the Hand Pendant Height Down button. Verify the table moves down.
- ☐ Press and hold the Hand Pendant Trendelenburg button. Verify the table moves into a Trendelenburg position.
- ☐ Press and hold the Hand Pendant Reverse Trendelenburg button. Verify the table moves into a reverse Trendelenburg position.
- ☐ The Tilt/Roll function of the base is Locked Out when the Axis Jackson Controller is installed. The Tilt status indicator on the Head-End Column should remain illuminated

Checking the Axis Jackson Hinged Frame

Perform all the steps in this procedure to verify correct Axis Jackson operation.

Confirm the Axis Jackson Hand Pendant cable is inserted into the port located on the side of the Head-End Frame Support Assembly.

- ☐ Confirm the Axis Jackson Controller power cord is plugged into a hospital grade power outlet and the ON/OFF power switch is toggled to the ON position. Verify the switch illuminates; this indicates power is applied to the table top.
- ☐ Depress and hold the Axis Jackson Hand Pendant Hinge Up button. Verify the Hinge of the frame moves up and the Foot-End of the frame moves down.
- ☐ Continue to depress the Hinge Up button until motion stops. Verify the Hinge angle displayed on the Hand Pendant is +35° (±2°).
- ☐ Depress and hold the Hand Pendant Hinge Down button. Verify the Hinge of the frame moves down.
- ☐ Continue to depress the Hinge Down button until motion stops. Verify the Hinge angle displayed on the Hand Pendant is -20° (±2°).
- ☐ Press and hold the Hand Pendant V Hinge Up button. Verify the Hinge of the frame moves up.
- ☐ Continue to depress the V Hinge Up button until motion stops. Verify the Hinge angle displayed on the Hand Pendant is +35° (±2°).

☐ Press and hold the Hand Pendant V Hinge Down button. Verify the Hinge of the frame moves down.

☐ Continue to depress the V Hinge Down button until motion stops. Verify the Hinge angle displayed on the Hand Pendant is -20° (±2°).

☐ Press and hold the Hand Pendant Foot Elevator Down button. Verify the Foot-End of the frame moves down.

☐ Press and hold the Hand Pendant Foot Elevator Up button. Verify the Foot-End of the frame moves up.

Note: The Foot-End of the frame moves up unless it is at the neutral (level) position.

☐ Press and hold the Hand Pendant Lateral Roll Left button. Verify the Hinge frame rolls to the left when standing at the Head-End of the frame and facing the Foot-End Column.

☐ Press and hold the Hand Pendant Lateral Roll Right button. Verify the Hinge frame rolls to the right when standing at the Head-End of the frame and facing the Foot-End Column.

☐ Move the Hinge Up or Hinge Down and translate the frame to Lateral Roll Right or Left. Now, press and hold the Hand Pendant 'Return To Home button'. Verify the Hinged Frame rolls back to level and then returns the Hinge to the neutral position. Verify the Hinge angle displayed on the Hand Pendant is 00°. All three LEDs corresponding to the Hinge, Foot Elevator and Lateral Roll should all be illuminated when the frame is in the neutral position.

☐ Toggle the ON/OFF switch for the Advance Control Pad System to the ON position Verify that air comes out of the tubing connector port on the Controller.

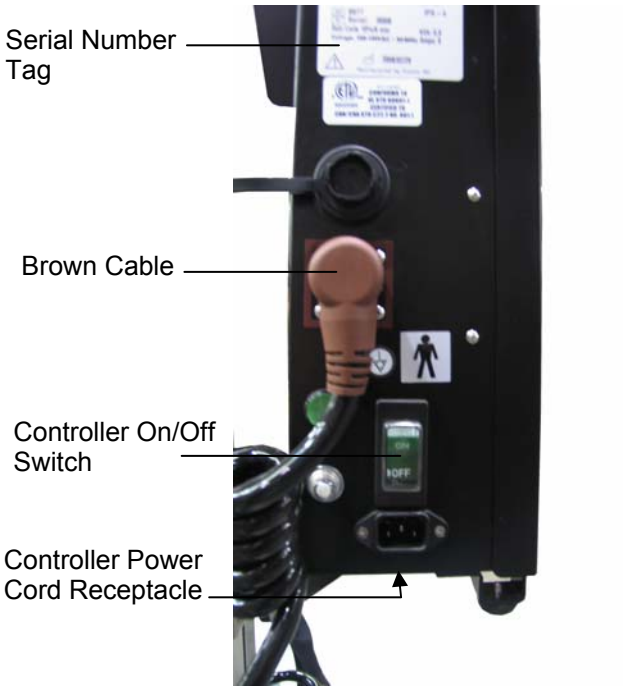
☐ Press the Cycle Selection button on the ACP Control Panel and confirm the cycles change accordingly.

☐ Press the red E-Stop button in. An audible beep should be heard. The red LED should flash. To reset, turn the red button in the direction of the arrows to reset.

6.0 OPERATING THE SYSTEM

Axis Jackson Controller:

Power On/Off



1.0 Figure 11: Controller ON/OFF Switch

The Axis Jackson Controller (P/N 6977-4007) has a power ON/OFF switch. This switch also serves as a circuit breaker and in the event of an overload condition the switch will trip. To reset the circuit breaker, toggle the switch to the OFF position and then to the ON position.

IMPORTANT: Determine and correct the source of the overload prior to resetting this switch.

Emergency Stop (E-Stop) and Reset

To immediately interrupt the power to the Axis Jackson System, press the Emergency Stop Button. An audible beep will be heard from the Controller and the red LED will illuminate and flash to indicate that the power has been interrupted

To reset the system, turn the Emergency Stop Button in the direction of the arrows until it returns to the original position.

Figure 12: Axis Jackson Controller Emergency Stop

Advance Control Pad System

Figure 13: ACP Control Panel

The Axis Jackson System includes the Advance Control Pad System (ACP) with Tempur-med®. Tempur-med® Axis Jackson ACP Pads provided are:

(1) Left Contoured, ACP Combination Hip and Thigh Pad (P/N 6977-710)

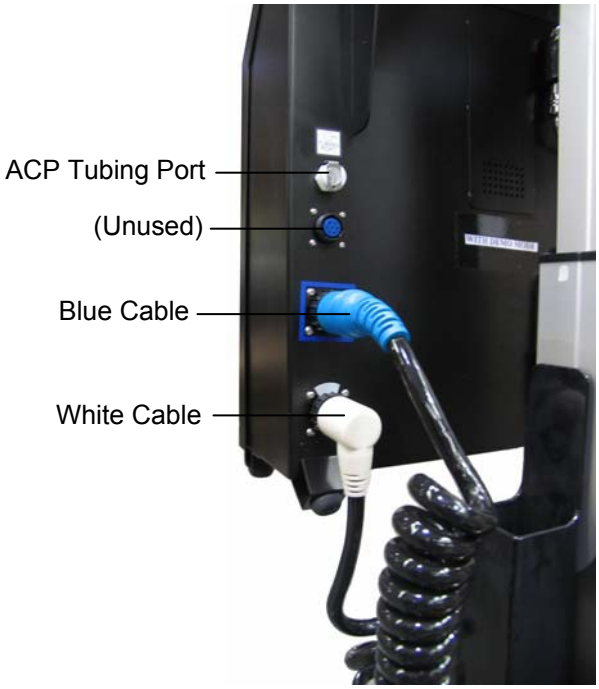
(1) Right Contoured, ACP Combination Hip and Thigh Pad (P/N 6977-720)

(1) Bilateral Winged ACP Chest Pad (P/N 6977-700)

The pads are designed specifically with Tempur-med® material for use with the Axis Jackson Hinged Frame and Controller. Air cells within the pads inflate and deflate with varying degrees of frequency and duration providing massage action and periodic pressure point stimulation to the patient's chest, hips and thighs.

At the discretion of the physician, the pads can be used for patient support on the Axis Jackson Hinged Frame without the massage action being activated.

The Axis Jackson Controller must be turned on at its main power switch in order to use the built-in Advance Control Pad System. The ACP Control Panel is located on the front of the Controller. Turn on the ACP System by toggling the On/Off switch to the ON position. The ACP panel LEDs will light up and air flow can be felt at the tubing connection port at the back of the Controller.



2.0 Figure 14: Port to Connect ACP Tubing

Prior to patient use, the ACP Quick Connect Tubing needs to be connected to the pads and the Controller.

After the Chest Pad and Hip/Thigh Pad are in place on the frame, the tubing can be connected to the pads. Align the tubing with the long end directed to the pad furthest away from the Controller port.

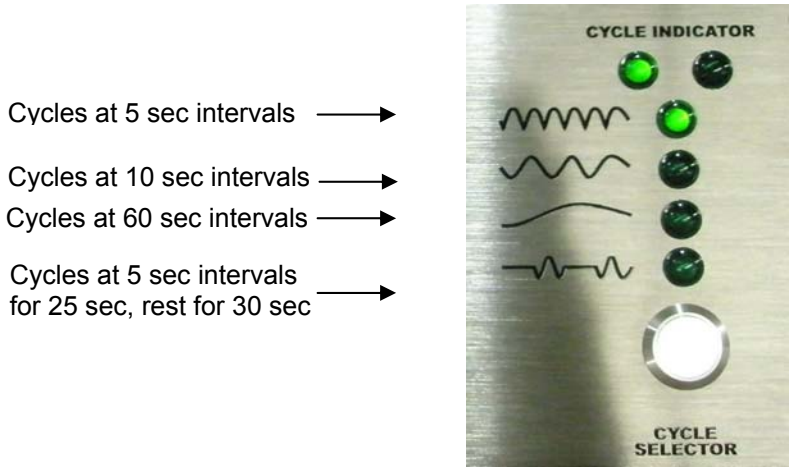
Secure the ACP tubing with the Velcro™ and the clips along the frame. Ensure the tubing is secure and out of the way such that the tubing will be able to move when the Hinged Frame is moved. Utilize the Hand Pendant and move the Hinge Up and Hinge Down to the extent of its travel. Re-adjust the ACP tubing as may be required.

IMPORTANT: Verify the ACP tubing will not be stretched or pinched during hinge movement which may interrupt or obstruct air flow to the pads. Failure to do so may result in ACP malfunction.

Cycle Selector and Cycle Indicator

The ACP Control Panel graphically illustrates 4 pre-programmed cycles. The graphic shown in Figure 15 illustrates the frequency and duration of the air cells movement.

Choice of cycles is at the discretion of the user and whether or not more or less frequent massage is preferred.



2.1.1 Figure 15: ACP Control Panel Cycle Selector and Cycle Indicator

Pressing the Cycle Selector Button changes the frequency at which the cells in the pads inflate and deflate. Pressing the Button once moves the selected mode from 1 to 2, once more from 2 to 3, next 3 to 4, the next press changes the cycle from 4 to 1.

Cycle Indicators (2) are located on the ACP Control Panel. The Cycle Indicators provide visual confirmation that ACP system is alternating cycles.

Note: The Advance Control Pad System is not utilized with the Supine Tops and one piece table pad and the ACP control switch can remain in the OFF position. However the ON/OFF switch to the Controller needs to remain in the ON position at any time the Hip/Thigh and Chest Pad will be utilized for prone positioning.

Axis Jackson System Manual Operation

In the event of a power failure, the Hinge and the Foot Elevator may be operated manually to return the Hinged Frame to a level position to facilitate patient transfer.

To manually operate the Hinge:

1. Turn the power off at the Controller and unplug the AC power cord. Disconnect Cable, color coded blue, to Hinged Frame.

⚠ CAUTION Failing to turn off the power and unplug the cord may cause a potential safety hazard that may result in injury to the operator.

2. Use the Gearbox Crank Handle (P/N 6977-886) which is stored on the side of the Foot Elevator.
3. Remove the 1.25" (3.2 cm) Black Cover Plug (P/N NB0339) and the 3/4" (1.9 cm) Black Cover Plug (P/N NB0363) from either the right or left side of the Foot-End of the Hinged Frame and insert the Gearbox with Crank Handle into the socket.
4. Turn the Gearbox Crank Handle to raise the Hinge to the level position or to lower the Hinge to a level position.
5. Return the Gearbox Crank Handle to the storage location on the side of the Foot Elevator.
6. Recap the openings on the side of the Foot-End of the Hinged Frame with the Black Cover Plugs.

To manually operate the Foot Elevator:

1. Turn the power off at the Controller and unplug the AC power cord.
2. Use the Crank Handle (P/N 6977-679) which is stored on the back of the Controller.
3. Remove the 1" (2.5 cm) Black Cover Plug (P/N NB0360) on top of the Foot Elevator and insert the Crank Handle into the socket to begin manual operation.
4. Turn the Crank Handle clockwise to raise the Foot-End of the Hinged Frame back to a level position.
5. Return the Crank Handle to the storage location on the back of the Controller. Clip into place.
6. Recap the opening on the top of the Foot Elevator with the Black Cover Plug.

7.0 PRONE POSITIONING

Prone Set-up On Hinged Frame

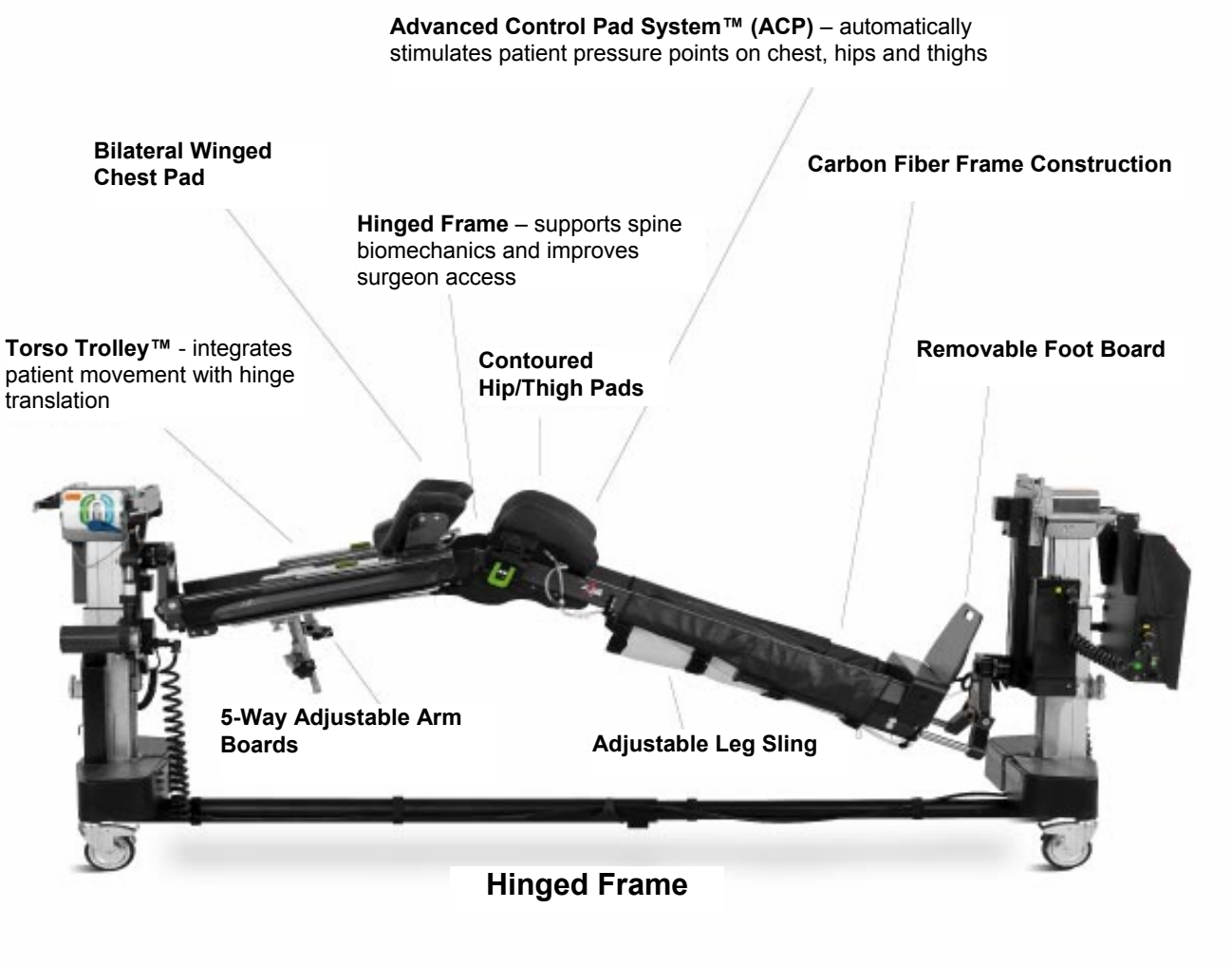

Advanced Control Pad System™ (ACP) – automatically stimulates patient pressure points on chest, hips and thighs
Bilateral Winged Chest Pad
Carbon Fiber Frame Construction
Hinged Frame – supports spine biomechanics and improves surgeon access
Torso Trolley™ - integrates patient movement with hinge translation
Contoured Hip/Thigh Pads
Removable Foot Board
5-Way Adjustable Arm Boards
Adjustable Leg Sling
Hinged Frame

Figure 16: Axis Jackson for Prone Procedures

The Axis Jackson System can be set-up for prone patient positioning according to the following procedure:

Move the table to the desired location and lock the base by engaging the (4) caster locks

Confirm that the Axis Jackson Hinged Frame is correctly mounted on the base and the Controller is plugged in and turned on. The Axis Jackson Hand Pendant will illuminate displaying the current Hinge angle. It should read 00°. If it does not, confirm the Hand Pendant is connected, power to the frame is turned on and depress Return to Home

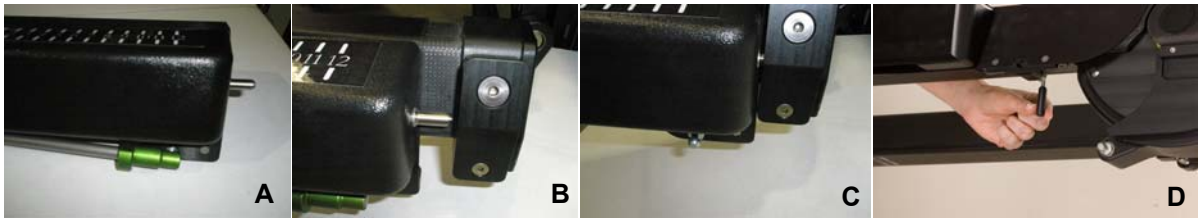
Confirm that the 5803 modular base is plugged in and turned on. The 5803 Hand Pendant indicator lights will be illuminated as well as the Head-End Column indicator lights for the Rotation Safety Lock, the Rotation Lock and the Tilt Drive Status will be illuminated.

Torso Trolley™

The Torso Trolley™ consists of a Chest Slide (P/N 6977-503) to which the Bilateral Winged ACP Chest Pad and 5 way Adjustable Armboards are mounted. To install the Chest Slide on the Hinged Frame, first ensure the Hinged Frame is in the neutral position, Hinge angle 00° and table level side to side.

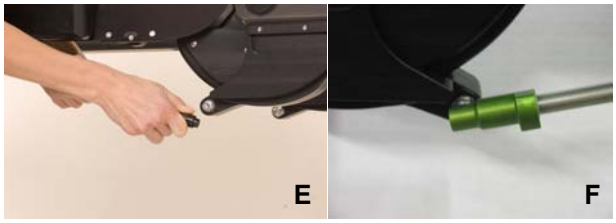
Figure 17: Rail Assembly

1. Slide the Right Rail Assembly (P/N 6977-501) and Left Rail Assembly (6977-502) onto the corresponding torso section of the Hinged Frame and lock into position. (Refer to pictures A-D).



WARNING Verify the Left and Right Rail Assemblies are locked in position to eliminate unintended Torso Trolley movement and the potential for injury to the patient.

2. Connect the linkage bar of the Rail Assembly to the Hinge by removing the bar from its storage position and securing the green end over the Hinge knob. (Refer to pictures E-F).



3. Position the Chest Slide over the brackets and place into position. The post of the Rail Assembly will slip into position within the slide. After it is placed, you should confirm operation by simultaneously depressing the green handles and pushing outward. This releases the pins on the slide and should allow the Chest Slide to be moved toward the head of the table and back toward the foot of the table. The 1-12 scale mounted on each Rail Assembly assists in identifying where the slide is in its range of movement.

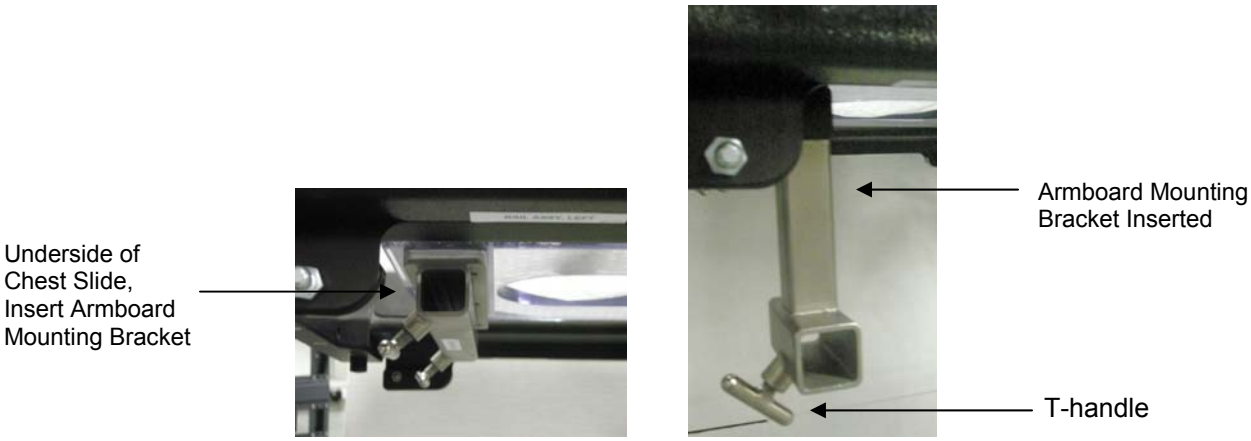


Figure 18: Armboard Mounting Brackets

4. Secure the Chest Slide by installing the Armboard Mounting Brackets (P/N 6977-570). Insert the Armboard Mounting Brackets into the corresponding underside of the Chest Slide and secure with the locking T-handle.

Figure 19: Torso Trolley w/Bilateral Winged ACP Chest Pad

5. To attach the Bilateral Winged ACP Chest Pad (P/N 6977-700) to the Chest Slide, slide the wings under the black tab (see Figure 20). The indentation for the supra-sternal notch should be at the Head-End.

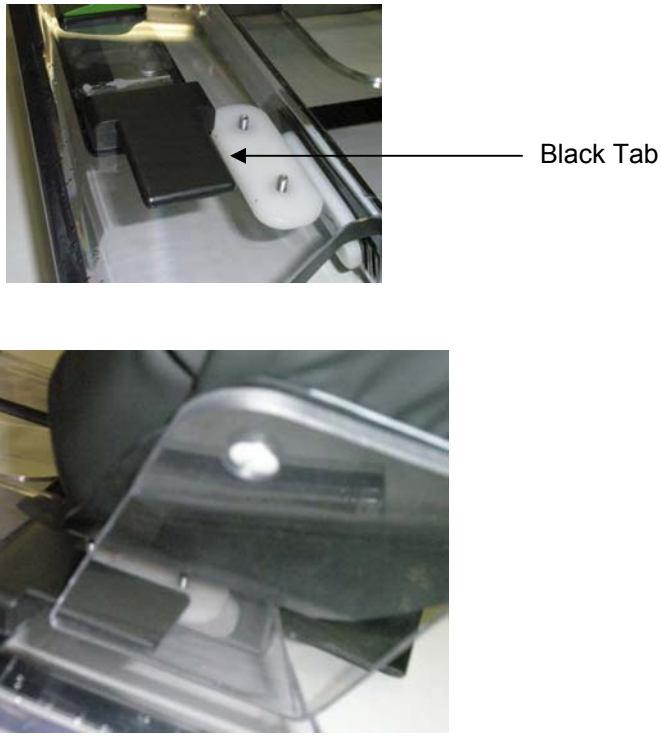


Figure 20: Black Tab and Sliding Chest Pad in Place

6. The Bilateral Winged ACP Chest Pad is designed specifically for use with the Axis Jackson System. Air cells within the center of the Tempur-med® pad inflate and deflate with varying degrees of frequency and duration, providing massage action and periodic pressure point stimulation to the patient's chest. At the discretion of the physician, the pad can be used for patient support without the pneumatic action. Also at the discretion of the physician, additional foam or padding can be placed between the patient and the sides of the pad as needed to accommodate varying sizes and needs of patients.
7. Connect the tubing from the chest pad to the ACP Quick Connect Single Use Tubing. Insert the white nipple on the disposable tubing into the black/gray port of the tubing from the chest pad. To disconnect the tubing depress the gray portion of the port and remove the white nipple.
8. Secure the ACP tubing with the Velcro™ and the clips along the frame. Ensure the tubing is secure and out of the way such that the tubing will be able to move when the Hinged Frame is moved. Utilize the Hand Pendant and move the Hinge Up and Hinge Down to the extent of its travel. Re-adjust the ACP tubing as may be required.

IMPORTANT: Verify the ACP tubing will not be stretched or pinched during hinge movement which may interrupt or obstruct air flow to the pads. Failure to do so may result in ACP malfunction.

5-Way Adjustable Armboards

The 5-way Adjustable Armboards (P/N 6977-980) are integral to the Torso Trolley, and when in place, move with the trolley when the Hinge is articulated.

Figure 21: 5-way Adjustable Armboard Mounting Bracket

Figure 22: Armboard Mounted on the Torso Trolley

Mount the 5-way Adjustable Armboard unit by sliding the pivoting bracket into the mounting bracket and securing the locking T handle. To adjust the Armboards, turn the black knob until there is free movement of the pivoting arm, this allows for height adjustment, lateral movement and pivoting of the Armboard. The Armboards can be installed and pivoted out of the way for transfer of the patient on and off the frame.

When in place, the Armboards can also be translated toward the Head-End or Foot-End depending on the positioning needs of the patient. To release the Armboard and allow for translation towards the Head-End or Foot-End of the Hinged Frame, pull down on the silver knob at the underside of the Armboard to release. Move into the desired position and then return the silver knob to the locked position.

Contoured Combination ACP Hip/Thigh Pads

Attach the Right and Left Contoured Combination ACP Hip/Thigh Pads (P/N 6977-720 and P/N 6977-710) at the Hinge.

The pads are designed to be right and left sided and are labeled accordingly. The pads must be oriented to the patient when the patient is positioned prone on them. Confirm the pads are applied to the appropriate side of the Hinged Frame. When properly installed, the pads should slope down toward the Foot-End of the table and the green latch will be on the outside of the frame.

Figure 23: Un-Latched Hip/thigh Pad on Hinged Frame

Figure 24: Left Hip/Thigh Pad Latched in Place at the Hinge with ACP Tubing Connected

To mount, hold the appropriate Hip/Thigh Pad with the green latch in the open position over the Foot-End section of the frame. Place the inside of the pad bracket over the top of the frame to engage the inside of the rail on the Hinge Cover. Slide the pad towards the Hinge for the full length of the rail. It will come to a stop. Close the green latch down on the rail. The pad should be secure on the rail in Position 1. Using both hands, attempt to pull the pad toward the Foot-End of the frame - it should not move. If it is not latched securely, remove the pad and repeat the process.

IMPORTANT: The Hip/Thigh Pads are recommended to be latched in Position 1, (closest to the Hinge) for the majority of patient heights less than 7 feet (213 cm) tall. Moving the Hip/Thigh Pads to an alternate position (away from the Hinge) should be done only at the discretion of the attending physician.

Connect the tubing from the Hip/Thigh Pads to the ACP Quick Connect Single Use Tubing. Insert the white nipple on the disposable tubing into the black/gray port at the end the tubing from the Hip/Thigh Pads. To disconnect the tubing depress the gray portion of the port and remove the white nipple.

⚠ WARNING Secure the ACP tubing with the clips along the frame. Ensure the tubing is secured so that it is out of the way but will not be stretched or pinched which may obstruct air flow.

⚠ WARNING Verify that the Hip/Thigh Pad green locking levers are latched securely in place to eliminate unwanted Pad movement.

Leg Sling

Figure 25: Leg Sling (P/N 5840-450)

To install the adjustable Leg Sling (P/N 5840-450), place the sling over the trunk section of the Hinged Frame. Feed the four straps through their respective buckles on the opposite side of the sling and secure. The sling should be adjusted for each patient.

The straps on the sling consist of a double-sided hook closure that allows for infinite adjustment along the length of the strap. The hook end of the strap may be folded over onto the loop portion of the strap to allow for greater adjustability. The strap may be folded over itself again to shorten, thereby raising the sling and decreasing the hip flexion angle of the patient.

Place two (2) or three (3) pillows in the leg sling approximately where the patient's lower legs will rest to help achieve the desired amount of knee flexion and support.

Foot Board

A removable Foot Board (P/N 6977-990) is provided for placement at the Foot-End of the Hinged Frame. It allows for positioning pillows to be free of any contact with the Foot-End Support Assembly.

Figure 26: Removable Foot Board

Retractor Adaptor for Axis Jackson Hinged Frame

The Retractor Adaptor (P/N 6977-939) mounts on the Hinged Frame and provides 6 inches (15 cm) of side rail for mounting retractors.

Patient Care Kits – GentleTouch and ProneView®

The GentleTouch and ProneView® Patient Care Kits may be used with the Axis Jackson.

IMPORTANT: The choice of which Patient Care Kit best meets the positioning needs of the patient is at the discretion of the attending physician.

GentleTouch Patient Care Kit

The GentleTouch Patient Care Kit (P/N/ 6980) includes a GentleTouch Face Pillow, Chest Pad Cover, Hip/Thigh Pad Covers with Hinge Aprons and Foam Arm Cradles. The components should be utilized as described in the Patient Care Kit instruction sheet included in every kit.

ProneView® Patient Care Kit

The ProneView® Patient Care Kit (6980PV) includes a ProneView® Cushion Insert, Chest Pad Cover, Hip/Thigh Pad Covers with Hinge Aprons and Foam Arm Cradles. The components should be utilized as described in the Patient Care Kit instruction sheet included in every kit.

The ProneView® Patient Care Kit works with the provided ProneView® Helmet and Mirror System. The system is designed by the manufacturer to support the patient's head while in the prone position. Additionally, the position of the patient's facial alignment with the Helmet can be readily viewed while in the prone position.

The ProneView® Helmet and Mirror System includes:

1 reusable Adjustable Mirror Platform (P/N D28590CE)
1 reusable Helmet (P/N D28501CE)
1 single-use Cushion Insert (Cushion Inserts are provided in each Patient Kit)

Remove the ProneView® Helmet and Mirror System components from its packaging and visually inspect the components for any damage. Do not use damaged goods.

IMPORTANT: Before installing and using the ProneView® Helmet and Mirror System read all instructions and warnings in this Owner's Manual and the ProneView® Helmet and Mirror System instructions.

Note: The Adjustable Mirror Platform is a rectangular shaped device with a square shaped mounting post pattern. The Adjustable Mirror Platform can be mounted to the Chest Slide such that the 'longer' side of the platform can be oriented either parallel or perpendicular to the overall length of the table. Mounting of the Adjustable Mirror Platform with the longer side perpendicular to the overall length of the table will provide the most available clearance between the Helmet and the Head-End of the table.

Ensure that the Adjustable Mirror Platform Posts are in their lowest position by turning the Posts clockwise until the base of the Adjustable Posts comes to rest on the Adjustable Mirror Platform. This action will allow the Helmet Legs to easily engage the Adjustable Mirror Platform Posts during patient transfer.

With the Adjustable Posts facing up, place the Adjustable Mirror Platform onto the Chest Slide of the Axis Jackson. Figure 27 illustrates the Adjustable Mirror Platform mounted to the Chest Slide. Figure 28 illustrates the ProneView® Mirror and Helmet System.

⚠ WARNING Verify there is adequate space between the Helmet and the Head End Assembly to accommodate anticipated range of motion. The Axis Jackson Chest Slide is designed to move simultaneously when the Hinged Frame is translated to 'Hinge-Up or Hinge-Down'. Failure to verify may result in patient injury.

Refer to Section 9.0 Cleaning, Storage and Routine Maintenance for complete cleaning instructions for the ProneView® Helmet and Mirror System.

IMPORTANT: Remove the ProneView® components from packaging and visually inspect the components. The ProneView® Cushion Insert should be opened 60 minutes prior to use and the arm cradles should be opened 20 minutes prior to use for complete expansion of the foam.

'Fit' the ProneView® Cushion Insert into the Helmet and within the tabs provided at the chin end of the Helmet. Adjust the Cushion Insert openings to be centered relative to the Helmet openings.

Head-End Assembly
Adjustable Mirror Platform and Chest Slide (shown with the longer side of platform mounted perpendicular to the overall length of the table).

Figure 27. ProneView® Adjustable Mirror Platform positioned on the Chest Slide

Figure 28: View of ProneView® Helmet and Mirror System positioned on the Chest Slide

Transferring the Patient

⚠ WARNING Prior to transferring the patient to the Axis Jackson table top, verify that the Head-End and Foot-End Support Assemblies with Axis Jackson Hinged Frame are properly installed on the 5803 Advance Control Modular Base. Verify the T-pins pass completely through the Head-End and Foot-End Assemblies and Crossbars with the drop lock in sight and pivots freely. T-pins and drop locks should be visible and checked at both the Head-End (1 T-pin) illustrated in Figure 5, and at the Foot-End (2 T-pins) illustrated in Figure 7 in Section 4.0, Axis Jackson System Set-Up.

1. Position the patient stretcher or patient bed with the patient parallel to the table and the patient aligned with the chest, hip/thigh pads for easy transfer.

2. Adjust the position of the patient stretcher or patient bed so the patient's iliac crest is aligned with the top 1/3 of the Hip/Thigh Pad. Lock the stretcher or bed in place. Adjust the position of the Chest Slide Assembly so the Chest Pad is aligned with the patient's chest.
3. Ensure the Hinged Frame is in its neutral (level) position. It may be helpful to tilt the table slightly toward the patient, so as to lower the tops of the support pads.
4. Raise the patient stretcher or bed to be approximately level with the tops of the support pads.
5. Place the GentleTouch Face Pillow or the ProneView® Cushion Insert onto the patient's face and adjust the endotracheal tube (ET).

Prone Positioning with GentleTouch

When using the GentleTouch Face Pillow, follow the procedure below for patient transfer:

1. While the patient is supine, place the GentleTouch Face Pillow over the patient's face, taking care that the patient's eyebrows are visible to help avoid injury to the eye.
2. Hold the Face Pillow securely to the patient's face during the log-roll of the patient to the prone position.
3. Log-roll the patient onto the Hinged Frame and into the prone position, while supporting the head, torso and legs during the transfer.

   After log-rolling the patient to a prone position, verify there is adequate clearance between the patient's nose and the Chest Slide, and verify the endotracheal tube (ET) is not kinked.

Prone Positioning with ProneView®

When using the ProneView®, follow the procedure below for patient transfer:

1. While the patient is supine, place the Helmet containing the Cushion Insert over the patient's face, taking care that the patient's eyebrows are visible to help avoid injury to the eye.
2. Hold the Helmet and Cushion Insert securely to the patient's face during the log-roll of the patient to the prone position.
3. Log-roll the patient onto the Hinged Frame and into the prone position, while supporting the head, torso and legs during the transfer.

⚠WARNING After log-rolling the patient to a prone position and onto the Adjustable Mirror Platform on the Chest Slide, verify there is adequate clearance between the patient's nose and the mirror, and verify the endotracheal tube (ET) is not kinked.

4. Place the Helmet Legs onto the Adjustable Mirror Platform Posts. Adjust the Helmet height by turning the Adjustable Mirror Platform Posts counter clockwise as necessary to maintain a neutral neck position.

⚠ WARNING Verify there is adequate space between the Helmet and the Head End Assembly to accommodate anticipated range of motion. The Axis Jackson Chest Slide is designed to move simultaneously when the Hinged Frame is translated to 'Hinge-Up or Hinge-Down'. Failure to verify may result in patient injury.

Positioning the Hips and Thighs

The patient's iliac crest should rest in the top 1/3 of the Hip/Thigh Pad closest to the Hinge. Gently lift the patient at the location of contact for each pad and smooth the contact surface of the pad cover.

Confirm that the Hip/Thigh Pad green locking latches are closed and secure.

⚠ WARNING Verify the Hip/Thigh Pads are latched and secure on the rail to eliminate unintended Pad movement and the potential for injury to the patient.

⚠ CAUTION Verify the patient is correctly positioned on the Hip/Thigh Pads, and the Pads and Pad Covers are smooth and free of folds, creases and wrinkles to avoid irritation to the patient's skin.

Positioning the Chest

The Bilateral Winged Chest Pad supra-sternal notch indentation should contact the patient so the top edge of the chest pad is located 1" (2.5 cm) below the patient's supra-sternal notch. With ideal positioning, the Chest Pad should contact the patient so the load is borne predominantly by the superior aspect of the chest on the sternum.

To reposition the Chest Pad with a patient on the table, one person should lift the patient's chest slightly and a second person should move the Chest Slide either toward the head of the table or toward the Hinge. The scale 1-12 on the Rail Assembly assists the communication one person to the other where in the range of travel the Chest Slide should be moved. Gently lower the patient back onto the pad.

Confirm the Chest Pad is in the proper position and the Chest Pad Cover is without folds or creases.

⚠ CAUTION Verify the patient is correctly positioned on the Chest Pad, and the Chest Pad and Chest Pad Cover is smooth and free of folds, creases and wrinkles to help prevent irritation to the patient's skin.

Figure 29: Torso Trolley™

WARNING Positioning of the chest pad superior to the supra-sternal notch may apply pressure to the throat and patient's airway.

When the final patient position is achieved, turn on the ACP pads.

IMPORTANT: Verify the ACP tubing is connected to the Hip/Thigh Pads and Chest Pad. Failure to do so will result in no airflow to the pads.

IMPORTANT: Verify the ACP tubing will not be stretched or pinched during hinge movement which may interrupt or obstruct air flow to the pads. Failure to do so may result in ACP malfunction.

Positioning the Head

Support the patient's head using the ProneView® Cushion Insert with Helmet or GentleTouch Face Pillow which rests on the Chest Slide of the Torso Trolley.

Positioning the Arms

Place the arms in the foam arm cradles provided in the patient care kit. Position the arms on the Adjustable Armboards and secure with the Velcro™ Armboard straps provided. The arms should be flexed at the shoulders no greater than 90 degrees and at the elbows no greater than 90 degrees.

WARNING Hyperextension of the shoulder may cause compression of the brachial plexus resulting in a potential nerve or vascular injury.

Positioning the Legs

Position the legs in the Leg Sling as desired. When using the sling, place two or three pillows below the patient's knees and tibias to aid in minimizing the pressure on the knees and tibias.

Confirm that the patient's feet are free from contact with any table surface. Extra pillows may be positioned under the feet and lower legs to prevent the feet from contacting the foot board and to increase the knee flexion angle.

WARNING During surgery, monitor the patient's "position" with each movement of the Axis Jackson table top to ensure the patient remains safely positioned.

WARNING Proper pre-operative and intra-operative procedures must be followed to prevent venous stasis and pooling, pressure sore development, neuropathy, improper electrosurgical tissue grounding, hypotension and hypothermia.

WARNING Use care and monitor the patient when changing the position of the Axis Jackson; Height Up/Down, Hinge Up/Down, and Lateral Roll, to ensure the patient or table do not interfere with other equipment.

Buttock Straps

Apply the Buttock Strap (P/N 6977-739) across the lower gluteal area. This strap should be fed through the buckle on the Hip/Thigh Pads and back onto itself. Confirm the Buttock Strap is positioned low on the gluteal area, surrounds both hip/thigh pads, and is secured snugly around the buttocks. A blanket may be used under the Buttock Strap to protect the patient from direct contact with the Buttock Strap.

Safety Straps

Apply a 60" (1.5 m) Safety Strap (P/N 5840-43) across the patient's calves and around the frame and secure with the buckle. The strap should be tight enough to secure the legs against the pillows if the table is laterally tilted.

Figure 30: Patient Prone with Hinge Frame at +35°

Note: Due to the open nature of the Axis Jackson frame and the long duration of many spinal surgical procedures, the use of forced air warmers, fluid warmers and blankets should be considered to help prevent hypothermia. Blankets may be placed over the feet up to the gluteal area and across the shoulders and arms out of the surgical field to aid in maintaining the patient's body temperature. These devices should be used according to the manufacturer's directions and at the direction of the attending physician.

Using the Table

Prep and drape the patient. Do not allow the prepping solution to flow and pool below the patient's abdomen, to prevent dripping onto the components of the table.

IMPORTANT: Proper use of the patient kit will protect and keep clean critical components. The Hinge Apron of the Hip/Thigh Pad is designed to protect the Hinge from fluids.

⚠ CAUTION Failure to protect the Hinge from fluids may result in restriction in the movement of the Hinged Frame, damage to the equipment, or patient injury.

⚠ WARNING Proper pre-operative and intra-operative procedures must be followed to prevent venous stasis and pooling, pressure sore development, neuropathy, improper electrosurgical tissue grounding, hypotension and hypothermia.

⚠ WARNING During surgery, monitor the patient's "position" with each movement of the Axis Jackson table top to ensure the patient remains safely positioned.

⚠ WARNING Use care and monitor the patient when changing the position of the Axis Jackson; Height Up/Down, Hinge Up/Down, and Lateral Roll, to ensure the patient or table do not interfere with other equipment.

8.0 SUPINE AND LATERAL POSITIONING

Installing the Two-Piece Supine Top and Components

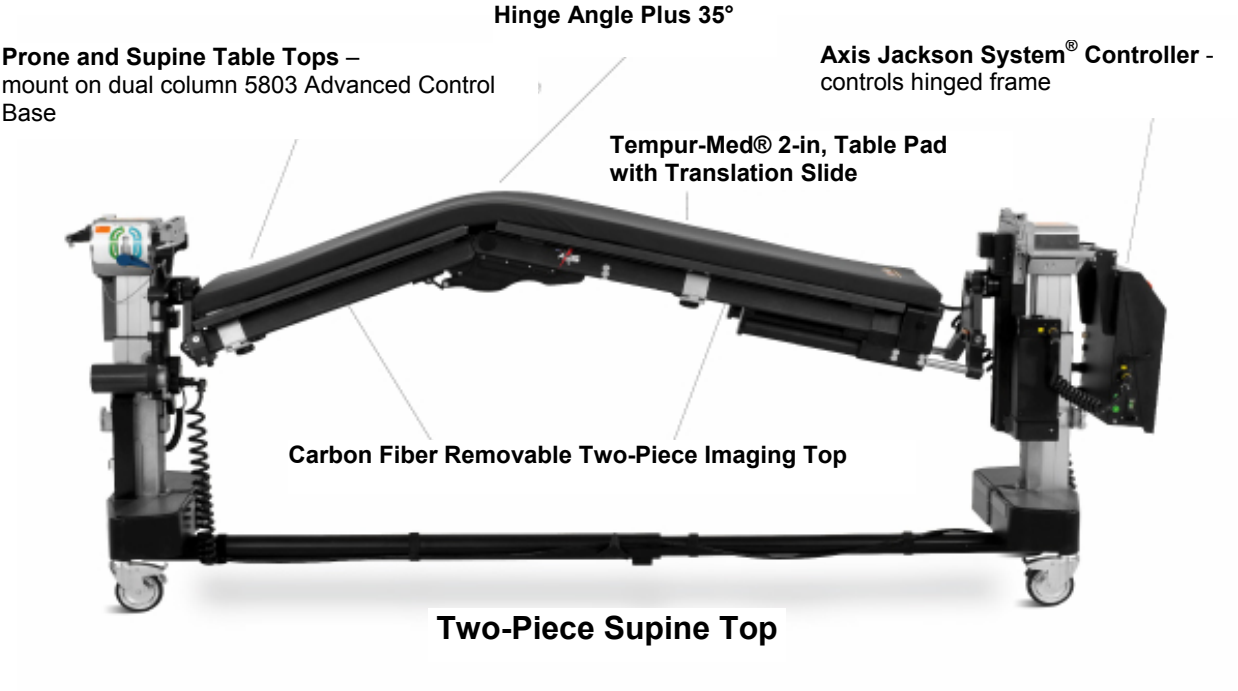

Hinge Angle Plus 35°
Prone and Supine Table Tops – mount on dual column 5803 Advanced Control Base
Axis Jackson System® Controller - controls hinged frame
Tempur-Med® 2-in, Table Pad with Translation Slide
Carbon Fiber Removable Two-Piece Imaging Top
Two-Piece Supine Top

Figure 31: 6977 Axis Jackson w/Two-Piece Supine Top mounted on 5803 Advanced Control Base

The Axis Jackson System, Hinged Frame and Two-Piece Supine Top, can be set-up for supine and lateral procedures according to the following procedure:

1. Move the table to the desired location and lock the base by engaging the (4) caster locks
2. Confirm that the Axis Jackson Hinged Frame is correctly mounted on the base; the Controller is plugged in and turned on. The Axis Jackson Hand Pendant will illuminate displaying the current Hinge angle. It should read 00°. If it does not, confirm the Hand Pendant is connected, power to the frame is turned on and depress Return to Home.
3. Confirm that the 5803 base is plugged in and turned on. The 5803 Hand Pendant indicator lights will be illuminated as well as the Head-End Column indicator lights for the Rotation Safety Lock, the Rotation Lock and the Tilt Drive Status will be illuminated.

The Two-Piece Supine Top is of carbon fiber construction and mounts above and below the Hinge of the frame to allow for articulation of the Hinge when the patient is positioned in a supine or lateral position.

Unlatch the latches on the torso section of the Two-Piece Supine Top and place on the frame. The top should be oriented so the latches will be located closest to the Head-End of the table. Slide the Head-End Section toward the Head-End Support Assembly until it rests against the end of the frame. Secure the latches around the frame with the black knob. The top is not intended to extend the entire length of the frame to the Hinge.

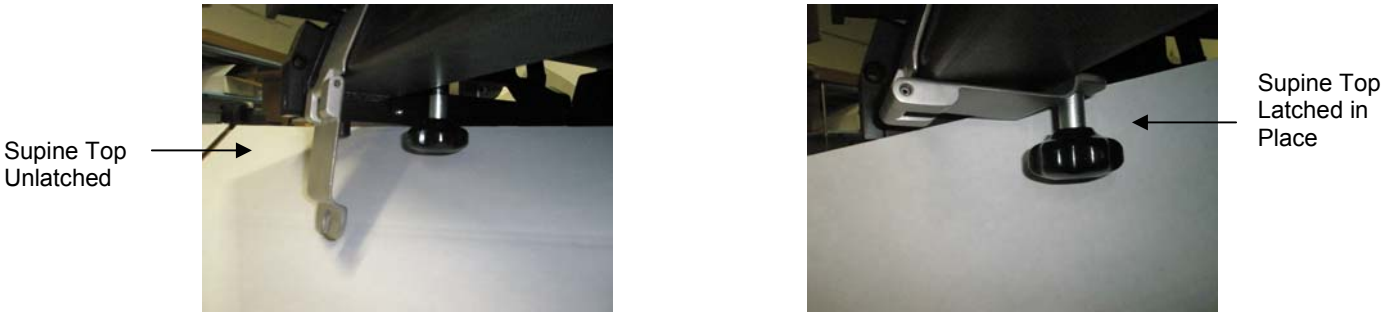


Figure 32: Unlatched and Latched Two-Piece Supine Top

Unlatch the latches on the Foot-End Section of the Two-Piece Supine Top and place on the frame. The top should be oriented so the latches will be located closest to the Foot-End of the table. Slide the top toward the Foot-End Support Assembly until it rests against the end of the frame. Secure the latches around the frame with the black knob. The top is not intended to extend the entire length of the frame to the Hinge.

WARNING Failure to follow the above prescribed procedures regarding the installation of the Two-Piece Supine Tops can result in restriction in the movement of the Hinged Frame, damage to the equipment or patient injury.

Figure 33: Two-Piece Supine Top Hinge +35°

Figure 34: Two-Piece Supine Top Hinge –20°

With the ability to articulate the Two-Piece Supine Top from level to Hinge Up or Hinge Down position, the patient surface needs to accommodate that movement. The Translation Sheet (P/N 6977-927) interfaces with the Supine Top and Tempur-med® Pad (P/N 6977-7000) to allow support and movement. With the Two-Piece Supine Top in place, mount the Translation Sheet. Place the Translation Sheet with Velcro™ strips extending the length of the Sheet face-up. These strips match up with the corresponding strips on the bottom of the Tempur-med® Pad. Orient the Sheet with the label which reads "Head-End This Side to Face Tempur-med® Pad" to the Head-End Section of the Two-Piece Top. Smooth the Translation Sheet adhering the Velcro™ of the Head-End Section to the Translation Sheet. Next, place the Tempur-med® Pad over the Translation Sheet and secure the Velcro™ the entire length of the pad.

IMPORTANT: When the Translation Sheet and Tempur-med® Pad are installed correctly, the Translation Sheet will lie against the Foot-End Section of the tops. There is no Velcro™ on the Foot-End Section of the Supine Tops and no Velcro™ on the back of the Foot-End of the Translation Sheet to allow for translation of the sheet with pad when the Hinge is moved up or down.

⚠ WARNING Failure to follow the above procedures regarding the installation of the Translation Sheet and Tempur-med® Pad can result in restriction in the movement of the Hinged Frame.

Figure 35: Supine Top w/ 2” (5 cm) Tempur-med® Pad and Translation Sheet

Supine Top Side Rail Adaptor

Figure 36: Supine Top 6” (15 cm) Side Rail Adaptor
(P/N 6977-959)

A Supine Top Side Rail Adaptor (P/N 6977-959) is required for use with the Supine Top to protect the carbon fiber tops and provide a length of Side Rail from which Armboards, Retractors, Lateral Positioners and other accessories can be mounted.

Positioning the Patient Supine:

Figure 37: Patient Supine

Transferring the Patient

⚠ WARNING Prior to transferring the patient to the Axis Jackson table top, verify that the Head-End and Foot-End Support Assemblies with Axis Jackson Hinged Frame are properly installed on the 5803 Advance Control Modular Base. Verify the T-pins pass completely through the Head-End and Foot-End Assemblies and Crossbars with the drop lock in sight and pivots freely. T-pins and drop locks should be visible and checked at both the Head-End (1 T-pin) illustrated in Figure 5, and at the Foot-End (2 T-pins) illustrated in Figure 7 in Section 4.0, Axis Jackson System Set-Up.

1. Position the patient stretcher or patient bed with the patient parallel to the table.
2. Ensure the Hinged Frame is in its neutral (level) position.
3. Raise the patient stretcher or patient bed approximately level with the table top. Lock the stretcher or bed in place.
4. Transfer the patient to the table.

Positioning of the Patient Relative to the Hinge

The patient is positioned so their umbilicus is located midline to the Hinge.

Positioning the Arms

The patient's arms may be positioned parallel to the body; tucked and supported with padding and a draw sheet, or supported on Armboards. Place Side Rail Adaptor on the Supine Top where needed and mount appropriate optional Armboard and/or Crossarm Support.

Positioning the Legs

Confirm that the patient's feet are free from contact with the Foot-End Support Assembly by utilizing the Foot Board. Pillows may be positioned under the feet and lower legs at the discretion of the physician to achieve the desired position.

WARNING During surgery, monitor the patient's "position" with each movement of the Axis Jackson table top to ensure the patient remains safely positioned.

WARNING Proper pre-operative and intra-operative procedures must be followed to prevent venous stasis and pooling, pressure sore development, neuropathy, improper electrosurgical tissue grounding, hypotension and hypothermia.

WARNING Use care and monitor the patient when changing the position of the Axis Jackson; Height Up/Down, Hinge Up/Down, and Lateral Roll, to ensure the patient or table do not interfere with other equipment.

Safety Straps

Apply a (60") Safety Strap (P/N 5840-43) across the patient's calves and around the frame and secure with the buckle. The strap should be tight enough to secure the legs against the pillows if the table is laterally tilted.

Using the Table

Prep and drape the patient.

Refer to Section 6.0 Operating the System for instructions on how to operate the table.

WARNING Proper pre-operative and intra-operative procedures must be followed to prevent venous stasis and pooling, pressure sore development, neuropathy, improper electrosurgical tissue grounding, hypotension and hypothermia.

WARNING During surgery, monitor the patient's "position" with each movement of the Axis Jackson table top to ensure the patient remains safely positioned.

WARNING Use care and monitor the patient when changing the position of the Axis Jackson; Height Up/Down, Hinge Up/Down, and Lateral Roll, to ensure the patient or table do not interfere with other equipment.

Positioning the Patient Lateral:

Figure 38: Patient Lateral Hinge +35°, Foot Elevator in the Lowest Position

Transferring the Patient

⚠ WARNING Prior to transferring the patient to the Axis Jackson table top, verify that the Head-End and Foot-End Support Assemblies with Axis Jackson Hinged Frame are properly installed on the 5803 Advance Control Modular Base. Verify the T-pins pass completely through the Head-End and Foot-End Assemblies and Crossbars with the drop lock in sight and pivots freely. T-pins and drop locks should be visible and checked at both the Head-End (1 T-pin) illustrated in Figure 5, and at the Foot-End (2 T-pins) illustrated in Figure 7 in Section 4.0, Axis Jackson System Set-Up.

1. Position the patient stretcher or patient bed with the patient parallel to the table.
2. Ensure the Hinged Frame is in its neutral (level) position
3. Raise the patient stretcher or bed approximately level with the table top. Lock the stretcher or bed into place.
4. Transfer the patient to the table in the supine position.

Positioning of the Patient Relative to the Hinge

The patient is positioned so their umbilicus is located midline to the Hinge. Roll the patient into the lateral decubitus position. Secure the patient by means of at least two (2) patient safety straps or an optional lateral positioning device such as the Lateral Positioner (P/N 5300) or Deluxe Lateral Positioner (P/N 5301). Standard positioning aids i.e., pillows, an axiliary roll and foam or gel padding may be used for additional patient stability and comfort.

Positioning the Arms

The patient's arms may be positioned and supported on the optional Lateral Armboards (P/N 5364). Place Side Rail Adaptor on the Supine Top where needed and mount the Lateral Armboards.

Positioning the Legs

Confirm that the patient's feet are free from contact with the Foot-End Support Assembly by utilizing the Foot Board. Pillows may be positioned under the feet and lower legs at the discretion of the physician to achieve the desired position.

⚠ WARNING Proper pre-operative and intra-operative procedures must be followed to prevent venous stasis and pooling, pressure sore development, neuropathy, improper electrosurgical tissue grounding, hypotension and hypothermia.

⚠ WARNING During surgery, monitor the patient's "position" with each movement of the Axis Jackson table top to ensure the patient remains safely positioned.

⚠ WARNING Use care and monitor the patient when changing the position of the Axis Jackson; Height Up/Down, Hinge Up/Down, and Lateral Roll, to ensure the patient or table do not interfere with other equipment.

Safety Straps

Apply 60" (1.5 m) Safety Straps (P/N HB5840-43) across the patient's calves and around the frame and secure with the buckle. The straps should be tight enough to secure the legs against the pillows if the table is laterally tilted.

Using the Table

Prep and drape the patient.

Refer to Section 6.0 Operating the System for instructions on how to operate the table.

⚠ WARNING Proper pre-operative and intra-operative procedures must be followed to prevent venous stasis and pooling, pressure sore development, neuropathy, improper electrosurgical tissue grounding, hypotension and hypothermia.

⚠ WARNING During surgery, monitor the patient's "position" with each movement of the Axis Jackson table top to ensure the patient remains safely positioned.

⚠ WARNING Use care and monitor the patient when changing the position of the Axis Jackson; Height Up/Down, Hinge Up/Down, and Lateral Roll, to ensure the patient or table do not interfere with other equipment.

9.0 CLEANING, STORAGE, AND ROUTINE MAINTENANCE

Refer to the 5803 Advanced Control Base manual for cleaning instructions for the modular base. When cleaning the Axis Jackson System, remember the following:

- Do not pour any liquid on the table top, modular base or components.
- Never allow any liquid to enter the Hinge joints of the table top or modular base.
- Do not subject the table top or modular base to an equipment washing machine.
- Flooding, fogging or steam cleaning is not recommended and will void any warranty.
- Failure to thoroughly dry any surface after cleaning and disinfecting may result in rust. Rust formation can shorten the useful life expectancy of the equipment.

⚠ CAUTION The contents of the Patient Care Kits are intended for single use. It is recommended that all single-use items are appropriately discarded after each patient use.

Cleaning Recommendations:

ProneView® Helmet and Mirror System

- Clean after each use by spraying and wiping with germicidal cleaner then wipe dry, or wash with anti-bacterial soap and water, then wipe dry.

IMPORTANT: Do not autoclave the Helmet of Mirror Platform.

Straps, Clamps, and Adaptors

Clean safety straps, and other accessories with a mild detergent solution. Wipe dry with a soft, lint-free cloth.

- Do not submerge in water or cleaning solution.
- To disinfect the exterior surfaces, use a quaternary ammonium compound or similar disinfectant compound according to the manufacturer's directions for use. Wipe dry with a lint-free cloth.

MIZUHO OSI Tempur-med® Pads

IMPORTANT: The MIZUHO OSI Tempur-Pedic pad should always be stored in a flat position. It can actually get stiff in cold temperatures and can crack and break if in a rolled position. It is important that you allow the pad to warm to room temperature before attempting to utilize or handle it.

When handling always grasp by the entire thickness of the pad.

Do not lift, slide or carry MIZUHO OSI Tempur-med pads by grabbing the fabric. The cover may tear or rip.

The pad is intended to be cleaned in place. It does not need to be rotated or flipped.

Clean with standard hospital disinfectants labeled for use on table pads. Always dilute and rinse per manufacturer's label instructions. Wipe dry with a lint free cloth. Do not soak or autoclave pads. The continued use of bleach or highly concentrated chemicals will void the warranty on the cover.

When cleaning the bottom of the pad or the table top, simply lift one end of the pad, and fold it over onto the other end. Clean the pad or the table top then return to pad to flat on the table top.

Hinged Frame, Head-End and Foot-End Column Sliders and Head-End and Foot-End Support Assemblies

The exterior surfaces should be regularly wiped clean with a mild detergent solution and wiped dry with a soft, lint-free cloth.

Care should be taken to avoid exposing the equipment to excessive moisture. Flooding, fogging or steam cleaning is not recommended and will void any warranty.

To disinfect exterior surfaces use a quaternary ammonium or similar disinfectant compound according to the manufacturer's directions for use. Wipe dry with a soft lint-free cloth.

Note: The use of iodophors will cause staining.

Blood or other fluids, if allowed to remain on the frame or components for a long period of time, may require special cleaning to remove.

To correct staining and/or discoloration, use a commercially available hospital grade cleaner that is appropriately labeled as safe for use on the surface to be cleaned. Contact Technical Service if you need additional information.

Storage:

When it is not in use, store the Axis Jackson System and accessories in a clean, dry environment with a temperature range between 32°F and 120°F (0° C to 49°C). A dust cover is provided.

Storing the Table Top with its Base

The Axis Jackson Hinged Frame may be stored while it is installed on the 5803 Advanced Control Modular Base. A dust cover (P/N 6977-898) is provided to help protect the system.

Note: It is recommended that the 5803 Advanced Control Base be stored with its power cord plugged into an AC outlet, and with the ON/OFF power-switch in the ON position, to ensure that the batteries are fully charged and ready for service.

Removing and Storing the Axis Jackson Hinged Frame

The optional Axis Jackson Installation Cart (P/N 6977-900) is also designed to store the table top when not in use. Protect the components and the frame with the dust cover provided (P/N 6977-899).

Storing the Patient Support Components and Accessories

The Axis Jackson Component Cart (P/N 6977-901) provides a convenient storage method for all standard and optional accessories which may be utilized with the system. It is designed to allow easy access to the components and prevent damage while stored.

Protect the stored components and accessories with the dust cover provided (P/N 6977-909).

Component Cart

The Component Cart provides storage for the Axis Jackson System components and accessories used for prone, supine and lateral positioning.

Figure 39: Component Cart

Routine Maintenance:

Routine care of the system will assure many years of trouble-free service.

Inspection

Before use, inspect the system for possible damage, excessive wear, or non-functioning parts. Carefully inspect all critical and normally inaccessible areas, joints, movable parts, and electrical cords for possible damage. Damaged or defective products should not be used. Contact your local Mizuho OSI sales representative for repair or replacement.

Preventive Maintenance

Your Axis Jackson System should receive a preventive maintenance service every six months. Please contact the Mizuho OSI Technical Service department for a complete Preventive Maintenance Checklist. (Refer to the contact information in Section 12.0).

10.0 TROUBLESHOOTING GUIDE

5803 Advanced Control Modular Base

SYMPTOM	ACTION
Utilizing the 5803 Base Hand Pendant, the Lateral Tilt/roll buttons do not tilt/roll the Hinged Frame when pressed.	This is normal. The Lateral Tilt/roll function of the 5803 Base is locked out when the Axis Jackson Hinged Frame and Controller are mounted on the Base. Lateral Tilt/roll for the Hinged Frame is controlled by the Axis Jackson Hand Pendant.
5803 Base Hand Pendant buttons do not respond when pressed i.e. Height Up/Down, Tren/RevTren.	Connect the 5803 to an AC outlet. Ensure the Power Switch of the 5803 Base is toggled ON. Ensure the LED's of Base Hand Pendant are illuminated. Ensure the 5803 Hand Pendant is connected to the appropriate labeled socket of the Junction Box of the Axis Jackson Hand Pendant. Turn the 5803 Base Power Switch OFF and ON again to re-initialize the Base Hand Pendant. Refer to Section 4.0, System Set-Up, Axis Jackson Hand Pendant with Junction Box.
Rotation Safety Lock Indicator is not illuminated.	Ensure the Rotation Safety Lock Switch is in the ON position. Ensure the Rotation Lock Handle (blue handle) is in the locked position. Refer to the 5803 Advanced Control Base Owner's Manual for further information. If symptom remains, contact Technical Service.

SYMPTOM	ACTION
During a surgical procedure, the columns stop moving before end of travel or desired height is reached	Ensure that there are no obstructions interfering with the movement of the Head-End or Foot-end columns of the base Ensure the patient weight limit of 500 lbs. (224 kg.) has not been exceeded Depress the hand pendant Height Up, Tren or Rev Tren. The column(s) may raise and stop and then when the button is depressed a second time raise and stop. If necessary, to complete the procedure, you can continue to raise the columns in this manner until the desired height is reached. If you cannot raise the columns in this manner, contact Technical Service. Following the procedure, utilize the hand pendant and raise the height of the table to end of travel. Travel of the columns should be smooth and continuous. If the columns cannot be raised or travel of the columns is not smooth and continuous with no patient load, contact Technical Service.

Note: For complete instructions on the 5803 Advanced Control Base operation and functions, please refer to the Owner's Manual supplied with the Advanced Control Base (P/N NW0498).

6977 Axis Jackson Hinged Frame and Controller

SYMPTOM	ACTION
Controller main Power Switch is not illuminated.	Ensure the Controller power cord is securely connected to the Controller and plugged into a live AC power source (live electrical outlet). Toggle the main Power Switch OFF and back ON. If symptom remains, contact Technical Service.
No power to the Controller and the Main Power Switch is ON and illuminated.	Toggle the main Power Switch OFF and back ON. If symptom remains, contact Technical Service.
E-STOP light is flashing, the Controller is beeping, and the system power is interrupted.	Turn the E-STOP knob in the direction of the arrow on the knob to reset it. If symptom remains, contact Technical Service.
Advance Control Pad Cycle Selector and/or Cycle Indicator LEDs are not illuminated.	Ensure the Controller power cord is securely connected to the Controller and plugged into a live AC power source (live electrical outlet). Ensure the main Power Switch of the Controller is ON. Toggle the Power Switch of the Advance Control Pad System OFF and back to the ON position. If symptom remains, contact Technical Service.
No air flow is detected from the tubing port for the Advance Control Pad System.	Ensure the Controller power cord is securely connected to the Controller and plugged into a live AC power source (live electrical outlet). Ensure the main Power Switch of the Controller is ON. Toggle the Power Switch of the Advance Control Pad System OFF and back to the ON position. If symptom remains, contact Technical Service.

SYMPTOM	ACTION
No air flow is detected from the end of the ACP tubing.	Ensure there is airflow from the port on the back of the Controller and ACP tubing is connected to the port. Ensure the tubing is not kinked or obstructed. Ensure the Controller power cord is securely connected to the Controller and plugged into a live AC power source (live electrical outlet). Ensure the main Power Switch of the Controller is ON. Toggle the Power Switch of the Advance Control Pad System OFF and back to the ON position. If symptom remains, contact Technical Service.
No movement of the air cells detected when pressing firmly on the top of the ACP pads.	Ensure the ACP tubing is connected to the port on the back of the Controller. Ensure the ACP tubing is connected to the Hip/Thigh and Chest Pads. Ensure the tubing is not kinked or obstructed. Confirm air is coming through the tubing by disconnecting the tubing at the connection to each pad hose. Air should be felt passing from the tubing...reconnect the tubing. Ensure the Controller power cord is securely connected to the Controller and plugged into a live AC power source (live electrical outlet). Ensure the main Power Switch of the Controller is ON. Toggle the Power Switch of the Advance Control Pad System OFF and back to the ON position. If symptom remains, contact Technical Service.
Foot Elevator does not lower or raise the Foot-End of the frame.	Ensure the brown cable end is securely connected to the Controller and the Foot Elevator.

SYMPTOM	ACTION
Normal operation of the Foot Elevator is not intended to raise the Foot-End of the Hinged Frame above the level of the Hinge.	Ensure the Axis Jackson Hand Pendant with Junction Box is connected to the Head-End Assembly. Ensure there are no physical obstructions preventing the Foot-End of the Hinged Frame from lowering or raising. If symptom remains, contact Technical Service.
Hinge of the frame does not raise or lower.	Ensure the blue cable end is securely connected to the Controller and the Foot-End of the Hinged Frame. Ensure the Axis Jackson Hand Pendant with Junction Box is connected to the Head-End Assembly. Ensure there are no physical obstructions that prevent the Hinged Frame from lowering or raising. If symptom remains, contact Technical Service.
Utilizing Memory 1 and Memory 2 does not return the Hinge to the programmed position.	Refer to Section 4.0 of this manual, System Set-Up, Hinge Position Memory to program the Memory position. If symptom remains, contact Technical Service.
Hand Pendant display is erratic, and/or does not reflect movement of the Hinge.	Re-calibrate the Hinged Frame. Refer to Section 4.0, System Set-Up, Axis Jackson Hinged Frame Calibration Procedure. If symptom remains, contact Technical Service.
Hand Pendant display is blinking 100, 101,102 or 103.	At the Controller, toggle the main Power Switch OFF, wait 10 seconds and toggle to ON. If symptom remains, contact Technical Service.

SYMPTOM	ACTION
Hand Pendant display is blinking 104 or 105	Disconnect the Axis Jackson Hand Pendant and Junction Box at all connection points and re-connect. If symptom remains, disconnect the silver cable at the Head-End Assembly and re-connect. Disconnect the silver cable at the Controller and re-connect. If symptom remains, contact Technical Service.
Hand Pendant display is blinking 106 or 107.	At the Controller, toggle the main Power Switch OFF, wait 10 seconds and toggle to ON. Complete the process to re-calibrate the hinge. Refer to Section 4.0, System Set-Up, Axis Jackson Hinged Frame Calibration Procedure. If symptom remains, contact Technical Service.
Hand Pendant display is blinking 108 or 109.	Press the button on the Hand Pendant which will articulate the Hinged Frame into the opposite of the direction it is in when the error code is displayed. Example, if the Hinge Up button was depressed when error code 108 or 109 is displayed then push the Hinge Down button in response. If the V Hinge Down was depressed when error code 108 or 109 is displayed then push the V Hinge Up button in response. The display of the Axis Jackson Hand Pendant should return to normal function. If symptom remains, contact Technical Service
Hand Pendant display is blinking 00 or +35 or -20.	The Hand Pendant during the calibration process will blink 00, +35 or -20. Continue the calibration process. Refer to Section 4.0, System Set-Up, Axis Jackson Hinged Frame Calibration Procedure.
Hand Pendant display is blinking 110	Press V Hinge Down button on the Hand Pendant. Display should return to normal function. If symptom remains, contact Technical Service.

SYMPTOM	ACTION
Hand Pendant display is blinking 111.	Press V Hinge Up button on the Hand Pendant. Display should return to normal function. If symptom remains, contact Technical Service.
Hand Pendant display is blinking 112 or 113	At the Controller, toggle the main Power Switch to OFF, wait for one minute, and toggle to ON. If symptom remains, turn off and contact Technical Service.
Hand Pendant display is blank and the three LED's in the center of the Hand Pendant are cycling off and on.	Inspect the connections of the 5803 Base Hand Pendant and the Axis Jackson Hand Pendant Junction Box to ensure they are secure and correspond to the appropriate labeled socket. Ensure the connection to the Head-End Assembly from the Axis Jackson Hand Pendant is secure. If symptom remains, contact Technical Service.

11.0 REPAIR AND TECHNICAL SERVICE

Contact for Parts and Service

For detailed repair information, please contact the Mizuho OSI Technical Services department. (Refer to the contact information in Section 12.0)

Instant Support Value Package

Additional technical information and documentation is available via Mizuho OSI's subscription-based instant support. Instant support is a web-based virtual support agent accessible from the Mizuho OSI web page: www.osiosi.com. Instant support provides immediate and actionable answers to problems and questions on a 24/7 basis.

The Instant Support Value Package (ISVP) is a comprehensive support package designed to enhance the hospital's internal equipment support efforts. Contact your local Mizuho OSI sales representative for subscription information and additional details about the program.

To Order Replacement Parts

If unable to identify the part, please telephone, fax or email to Technical Service for assistance.

If part number is known, please telephone, fax or email the part number and description to Customer Service for price and availability. (Refer to the contact information in Section 12.0)

To place a Replacement Parts order, please telephone, fax or email to Customer Service the part number, description, price, customer number and method of shipment, with purchase order. Indicate that the order is for Replacement Parts (RP).

To Return Damaged Parts

If unable to identify a part please call, fax or email to Technical Service for assistance.

If part is known, please telephone, fax or email the part numbers and description of the parts to the Customer Service department for a Returned Goods Authorization (RGA) number. (Refer to the contact information in Section 12.0)

Clean and disinfect the parts prior to shipping. Complete a Certificate of Disinfected Parts, Document No. 40204-17.

Ship the parts with the RGA number clearly marked on the outside of the package.

To Send a Part for Repair

If unable to identify a part please call, fax or email to Technical Service for assistance.

If part is known, please telephone, fax or email the part number and description to the Technical Service department for a Repair Authorization (RA) number. (Refer to the contact information in Section 12.0)

Clean and disinfect the part prior to shipping. Complete a Certificate of Disinfected Parts, Document No. 40204-17.

Ship the part with the RA number clearly marked on the outside of the package.

The part will be evaluated and the customer will be contacted regarding the cost of repair. After customer approval of repair cost, part will be repaired and return shipped to customer.

12.0 CONTACTING MIZUHOSI

For Technical Service

Contact the Technical Service department for information and assistance with your Axis Jackson System.

Phone:	1-510-429-1500, extension 2
Toll-free within the United States:	1-800-777-4674
Outside the United States:	00 + 1-510-476-8199
Email:	techsvcs@mizuhosi.com
Web site:	www.mizuhosi.com
Fax:	1-510-429-8324

The Technical Services line is available Monday through Friday, 7 AM - 5 PM, Pacific Time. Outside of normal business hours, please leave a message. Please speak slowly, and give your name, phone number, facility name and city, and the affected equipment model number.

For Customer Service

Contact Customer Service when you need to return parts or order replacement parts. (For specific instructions, refer to Section 11.0).

Phone:	1-510-429-1500, extension 1
Toll-free within the United States:	1-800-777-4674
Fax:	1-888-329-4674
Email:	custsvc@mizuhosi.com
Mail:	Mizuho OSI
	30031 Ahern Avenue
	Union City, CA 94587-1212

Customer Service is available Monday through Friday, 6 AM – 4:30 PM, Pacific Time.

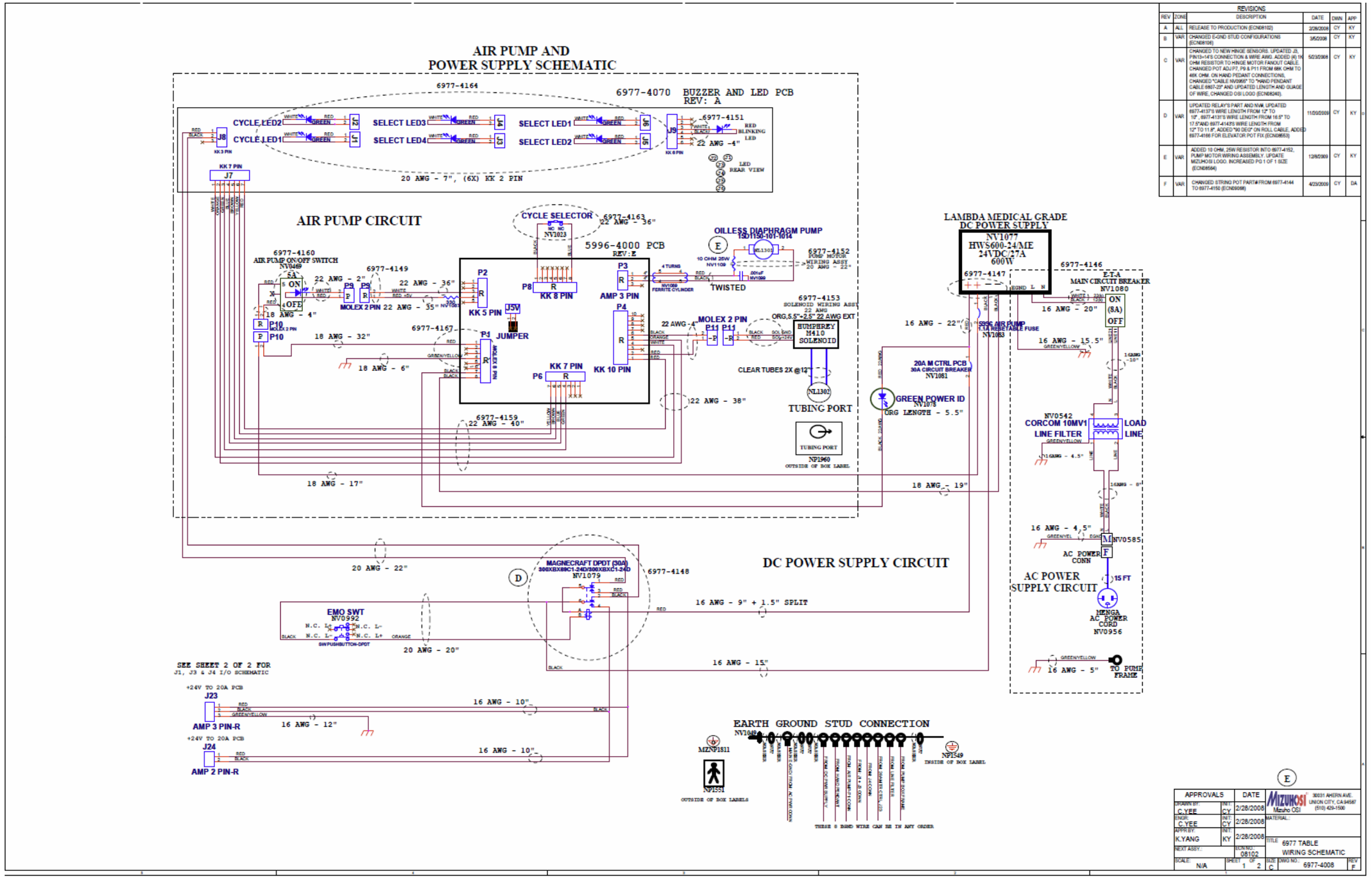
For Sales and Information

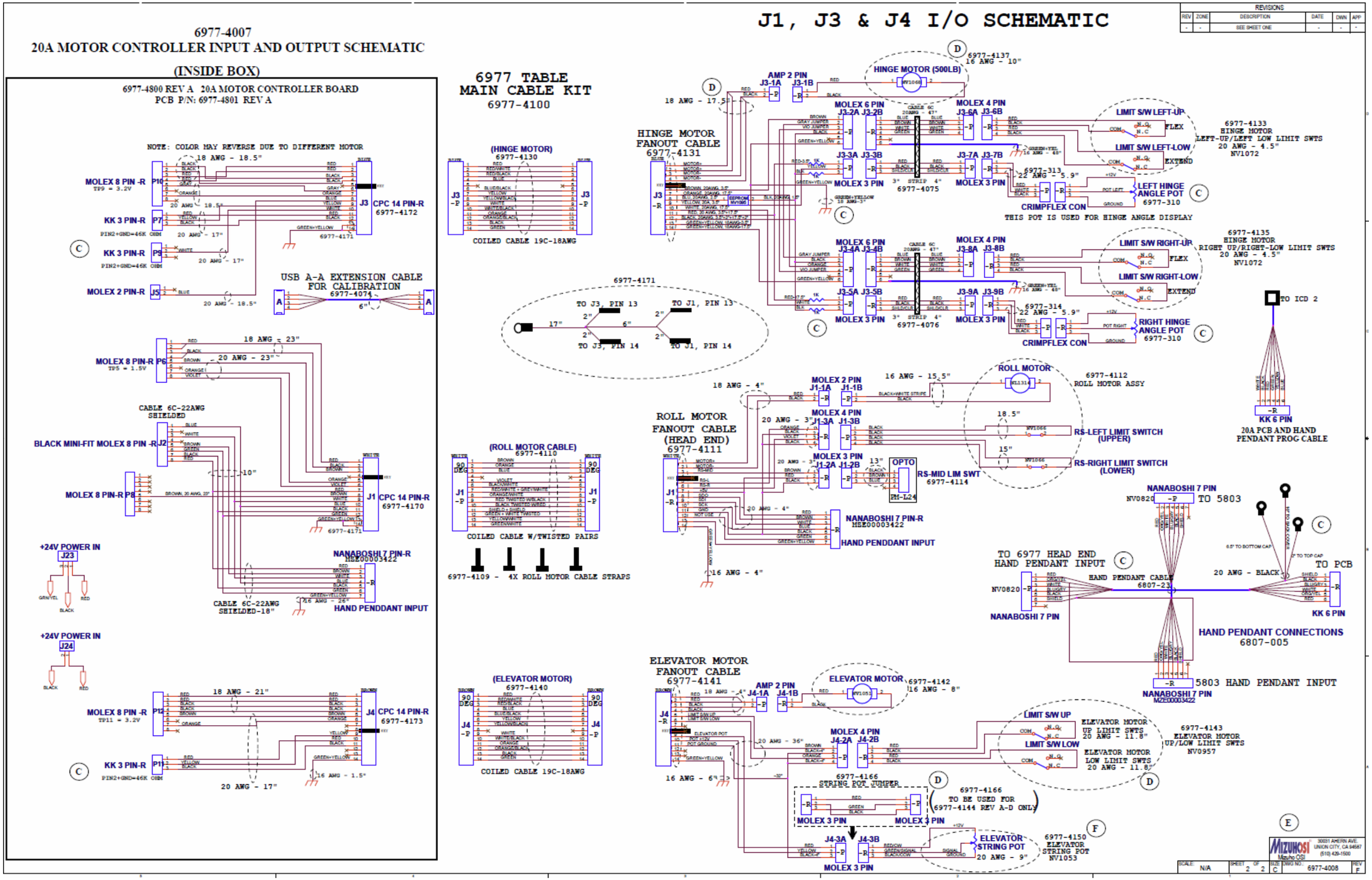
Contact your Mizuho OSI sales representative.

For EU Representative

Emergo Europe
Molenstraat 15
2513 BH The Hague
The Netherlands
Telephone: +31 (0) 70 345-8570
Telefax: +31 (0) 70 346-7299

13.0 6977 ELECTRICAL INTERCONNECT DIAGRAM (PAGE 1 OF 2)



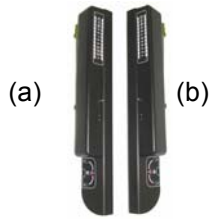

6977-4007
20A MOTOR CONTROLLER INPUT AND OUTPUT SCHEMATIC
(INSIDE BOX)
6977-4800 REV A 20A MOTOR CONTROLLER BOARD
PCB P/N: 6977-4801 REV A
NOTE: COLOR MAY REVERSE DUE TO DIFFERENT MOTOR
MOLEX 8 PIN -R
KK 3 PIN-R
KK 3 PIN-R
MOLEX 2 PIN-R
CPC 14 PIN-R
6977-4172
USB A-A EXTENSION CABLE FOR CALIBRATION
6977-4074
MOLEX 8 PIN-R
CABLE 6C-22AWG SHIELDED
BLACK MINI-FIT MOLEX 8 PIN -R
MOLEX 8 PIN-R
CPC 14 PIN-R
6977-4170
CABLE 6C-22AWG SHIELDED-18"
+24V POWER IN
J23
NANABOSHI 7 PIN-R
MZE00003422
HAND PENDDANT INPUT
+24V POWER IN
J24
MOLEX 8 PIN -R
KK 3 PIN-R
CPC 14 PIN-R
6977-4173
6977 TABLE
MAIN CABLE KIT
6977-4100
(HINGE MOTOR)
6977-4130
COILED CABLE 19C-18AWG
6977-4171
TO J3, PIN 13
TO J1, PIN 13
TO J3, PIN 14
TO J1, PIN 14
(ROLL MOTOR CABLE)
6977-4110
COILED CABLE W/TWISTED PAIRS
6977-4109 - 4X ROLL MOTOR CABLE STRAPS
(ELEVATOR MOTOR)
6977-4140
COILED CABLE 19C-18AWG
J1, J3 & J4 I/O SCHEMATIC
REVISIONS
REV ZONE DESCRIPTION DATE DWN APP
SEE SHEET ONE
HINGE MOTOR (500LB)
6977-4137
16 AWG - 10"
HINGE MOTOR FANOUT CABLE
6977-4131
AMP 2 PIN
MOLEX 6 PIN
MOLEX 4 PIN
MOLEX 3 PIN
3" STRIP 4"
6977-4075
LIMIT S/W LEFT-UP
LIMIT S/W LEFT-LOW
6977-4133
HINGE MOTOR
LEFT-UP/LEFT LOW LIMIT SWTS
20 AWG - 4.5"
NV1072
6977-313
22 AWG - 5.9"
CRIMPFLEX CON
LEFT HINGE ANGLE POT
6977-310
THIS POT IS USED FOR HINGE ANGLE DISPLAY
LIMIT S/W RIGHT-UP
LIMIT S/W RIGHT-LOW
6977-4135
HINGE MOTOR
RIGHT UP/RIGHT-LOW LIMIT SWTS
20 AWG - 4.5"
NV1072
6977-314
3" STRIP 4"
6977-4076
RIGHT HINGE ANGLE POT
6977-310
TO ICD 2
KK 6 PIN
20A PCB AND HAND PENDANT PROG CABLE
ROLL MOTOR
6977-4112
ROLL MOTOR ASSY
ROLL MOTOR FANOUT CABLE (HEAD END)
6977-4111
RS-LEFT LIMIT SWITCH (UPPER)
RS-RIGHT LIMIT SWITCH (LOWER)
RS-MID LIM SWT
6977-4114
NANABOSHI 7 PIN-R
MZE00003422
HAND PENDDANT INPUT
NANABOSHI 7 PIN
TO 5803
TO 6977 HEAD END HAND PENDANT INPUT
HAND PENDANT CABLE
6807-23
TO PCB
HAND PENDANT CONNECTIONS
6807-005
5803 HAND PENDANT INPUT
ELEVATOR MOTOR FANOUT CABLE
6977-4141
ELEVATOR MOTOR
6977-4142
16 AWG - 8"
LIMIT S/W UP
LIMIT S/W LOW
ELEVATOR MOTOR UP LIMIT SWTS 20 AWG - 11.8"
ELEVATOR MOTOR LOW LIMIT SWTS 20 AWG - 11.8"
6977-4143
ELEVATOR MOTOR
UP/LOW LIMIT SWTS
NV0957
6977-4166
STRING POT JUMPER
6977-4166
TO BE USED FOR
6977-4144 REV A-D ONLY
ELEVATOR STRING POT
20 AWG - 9"
6977-4150
ELEVATOR
STRING POT
NV1053
Mizuho OSI
30031 AHERN AVE.
UNION CITY, CA 94587
(510) 429-1500
SCALE: N/A
SHEET 2 OF 2
SIZE C
DWG NO: 6977-4008
REV F

14.0 STANDARD COMPONENTS AND OPTIONAL ACCESSORIES

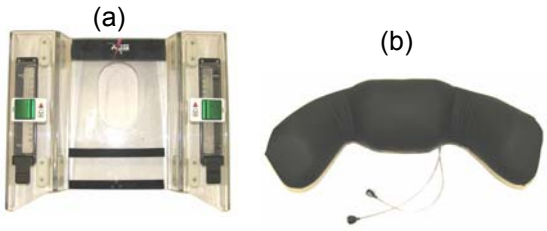
STANDARD COMPONENTS

(a) (b) Column Slider, Foot-End - 6977-640 (a) Column Slider, Head-End - 6977-641 (b)	 Foot-End Support Assembly - 6977-600
(a) (b) Head-End Support Assembly - 6977-601 (a) Head End Lockout Clamp (b)	 Axis Jackson Controller - 6977-4005
Cable Kit 6977-4100 The Cable Kit consists of the following: (1) Cable, Roll Motor (silver) 6977-4110 (1) Cable, Foot Elevator (brown) 6977-4140 (1) Cable, Hinge Motor (blue) 6977-4130	 Axis Jackson Hand Pendant with Junction Box 6807-5 Hand Pendant Holster 6977-4162

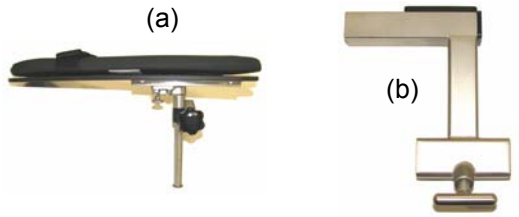
STANDARD COMPONENTS



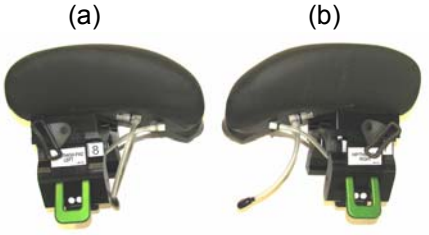
Rail Assembly, left (a)
6977-502
Rail Assembly, right (b)
6977-501



Chest Tray (a)
6977-503
Bilateral Winged Chest Pad With ACP (b)
6977-700



5-Way Adjustable Armboard (a)
6977-980
Armboard Mounting Bracket (b)
6977-570



Hip / Thigh Pad, left (a)
6977-710
Hip / Thigh Pad, right (b)
6977-720

Leg Sling
5840-450

Buttocks Strap
6977-739

STANDARD COMPONENTS

Side Rail Adaptor, 6" (15 cm)
6977-959

Removable Foot Board
6977-990

Tempur-med® Positioning Pillow – Queen (a)
6947
Tempur-med® Positioning Pillow – Standard (b)
6946

Axis Jackson Component Cart
(components not included)
6977-901

T-Pin
5840-361

60" (1.5 m) Safety Strap
5840-43

STANDARD ACCESSORIES

Retractor Adaptor
6977-939

Supine Top, head section
6977-955

Supine Top, foot section
6977-956

(a) (b)

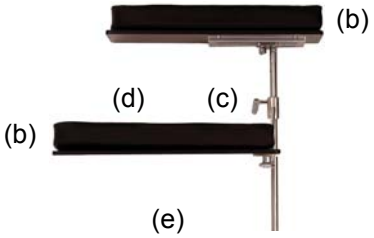
(a) 6977-7000 Supine Top Tempur-med® Pad
(shown on Supine Top which is ordered separately)
(b) 6977-927 Supine Top Translation Sheet
(shown under Tempur-med® pad)

Reorder Information

Dust Covers:
Axis Jackson System Cover
6977-898
Component Cart Cover
6977-909

OPTIONAL COMPONENTS

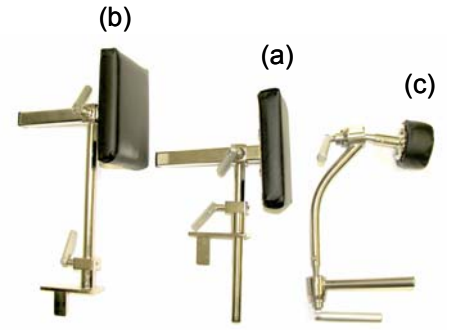
Supine Top Side Rail Adaptor, 18" (45 cm)
6977-973



5364 Lateral Arm Board Set w/2" (5 cm) Tempur-med® pads (requires Clark socket 5393)
(a) 5364-3 Lower Plate Weldment
(b) 5364-7018 Tempur- med® Pad
(c) 914-516 Drop Handle
(d) 5364-34 Upper Arm Board
(e) 5364-6 Knob

5857 Cross Arm Support w/1" (2.5 cm) Pad (requires Clark Socket 5393)
(a) 5855-402 Knob Assembly
(b) 5855-101 Arm Cross Upright
(c) 5857-7000 Cross Arm Tempur-med® Pad Assembly
(d) 5855-102 Arm Cross Assembly Weldment

5356 Pivoting Arm Board w/ 2" (5 cm) Pad
(a) 5356-7000 Arm Board Tempur-med® Pad
(b) 5362-6 Pivoting Arm Board w/o Pad



Lateral Positioner
5300 ((a) 3 rectangular pads)
5301 ((b) 2 rectangular pads, (c) 1 pubic pad)

5393 Clark Socket
5393-8 Handle Assembly

OPTIONAL ACCESSORIES

 5394 Side Rail Clamp Socket	Ordering Information Installation Cart 6977-900 Installation Cart Cover 6977-899

15.0 AXIS JACKSON SYSTEM® OWNER'S MANUAL CHECKLIST

IMPORTANT: To help ensure the safe and proper operation of the product, the Owner's Manual must be read entirely and understood thoroughly prior to the product's use. This use of this Checklist is intended only for use as an optional User tracking tool to record the various sections of the Owner's Manual that have been read and understood. The Owner's Manual should always be utilized as the source for complete product instructions.

The JXS- Axis Jackson System consists of (1) 6977 Axis Jackson System, and (1) 5803 Advanced Control Modular Base.

Use a 'checkmark' to indicate completion of an Owner's Manual Checklist item.

- ☐ **OWNER'S MANUAL SECTION 1 – SAFETY INFORMATION**
  - o SAFETY CONVENTIONS USED
  - o BEFORE USING THIS PRODUCT
  - o SAFETY AND HEALTH SYMBOLS USED
  - o PRODUCT SAFETY CERTIFICATIONS
  - o GENERAL PRODUCT SET-UP AND USE PRECAUTIONS
- ☐ **OWNER'S MANUAL SECTION 2 – AXIS JACKSON SYSTEM INTRODUCTION**
  - o GENERAL DESCRIPTION
  - o SPECIFICATIONS
  - o PRODUCT ACCEPTANCE
  - o GLOSSARY OF TERMS
- ☐ **OWNER'S MANUAL SECTION 3 – SYSTEM COMPONENTS**
  - o HEAD-END AND FOOT-END COLUMN SLIDERS
  - o HEAD-END SUPPORT ASSEMBLY
  - o FOOT-END SUPPORT ASSEMBLY
  - o HINGED FRAME
  - o AXIS JACKSON CONTROLLER WITH CABLE SET
  - o HAND PENDANT WITH JUNCTION BOX
- ☐ **OWNER'S MANUAL SECTION 4 – AXIS JACKSON SYSTEM SET-UP**
  - o PREPARING 5803 ADVANCE CONTROL BASE FOR MOUNTING FRAME
  - o INSTALLING THE COLUMN SLIDERS
  - o INSTALLING THE HEAD-END SUPPORT ASSEMBLY
  - o INSTALLING THE HEAD LOCK-OUT CLAMP
  - o INSTALLING THE FOOT-END SUPPORT ASSEMBLY
  - o UTILIZING THE OPTIONAL INSTALLATION CART TO MOUNT FRAME
  - o CONNECTING THE AXIS JACKSON CONTROLLER AND FRAME
  - o CONNECTING HAND PENDANT WITH JUNCTION BOX
  - o AXIS JACKSON HAND PENDANT OPERATION
  - o HINGE POSITION MEMORY
  - o HINGE ANGLE DIGITAL DISPLAY
  - o AXIS JACKSON HINGED FRAME CALIBRATION PROCEDURE
  - o LED INDICATORS
  - o 5803 HAND PENDANT OPERATION
- ☐ **OWNER'S MANUAL SECTION 5 – PRE-OPERATION FUNCTION CHECKS**
  - o CHECKING THE ADVANCED CONTROL BASE
  - o CHECKING THE AXIS JACKSON HINGED FRAME
- ☐ **OWNER'S MANUAL SECTION 6 – OPERATING THE SYSTEM**
  - o AXIS JACKSON CONTROLLER ON/OFF SWITCH
  - o EMERGENCY STOP AND RESET
  - o ADVANCE CONTROL PAD SYSTEM
  - o AXIS JACKSON SYSTEM MANUAL OPERATION
- ☐ **OWNER'S MANUAL SECTION 7 - PRONE POSITIONING**
  - o PRONE SET-UP ON HINGED FRAME
  - o TORSO TROLLEY – RAIL ASSEMBLIES, CHEST SLIDE, BILATERAL WINGED CHEST PAD

- 5-WAY ADJUSTABLE ARMBOARDS
- CONTOURED COMBINATION ACP HIP/THIGH PADS
- LEG SLING
- FOOT BOARD
- RETRACTOR ADAPTOR FOR AXIS JACKSON HINGED FRAME
- PRONEVIEW® HELMET AND MIRROR SYSTEM
- PATIENT CARE KITS – PRONEVIEW® AND GENTLETOUCH(optional)
- TRANSFERRING THE PATIENT
- POSITIONING THE HIPS AND THIGHS
- POSITIONING THE CHEST
- POSITIONING THE HEAD
- POSITIONING THE ARMS
- POSITIONING THE LEGS
- SAFETY STRAPS – BUTTOCK STRAP
- USING THE TABLE

☐ **OWNER'S MANUAL SECTION 8 – SUPINE AND LATERAL POSITIONING**

- INSTALLING THE TWO-PIECE SUPINE TOP, PAD AND TRANSLATION SHEET
- SUPINE TOP SIDE RAIL ADAPTORS
- POSITIONING THE PATIENT SUPINE
- TRANSFERRING THE PATIENT
- POSITIONING THE PATIENT RELATIVE TO THE HINGE
- POSITIONING THE ARMS
- POSTIONING THE LEGS
- SAFETY STRAPS
- USING THE TABLE
- POSITIONING THE PATIENT LATERAL
- TRANSFERRING THE PATIENT
- POSITIONING THE PATIENT RELATIVE TO THE HINGE
- POSITIONING THE ARMS
- POSTIONING THE LEGS
- SAFETY STRAPS
- USING THE TABLE

☐ **OWNER'S MANUAL SECTION 9 - CLEANING, STORAGE AND ROUTINE MAINTENANCE**

- 5803 ADVANCE CONTROL BASE
- PRONEVIEW® HELMET AND MIRROR SYSTEM
- TABLE PADS, STRAPS, CLAMPS AND ADAPTORS
- HINGED FRAME AND COMPONENTS
- STORAGE OF AXIS JACKSON SYSTEM
- COMPONENT CART
- ROUTINE MAINTENANCE
- INSPECTION
- PREVENTIVE MAINTENANCE

☐ **OWNER'S MANUAL SECTION 10 – TROUBLESHOOTING GUIDE**

- 5803 ADVANCE CONTROL MODULAR BASE
- 6977 AXIS JACKSON HINGED FRAME AND CONTROLLER

☐ **OWNER'S MANUAL SECTION 11 – REPAIR AND TECHNICAL SERVICE**

☐ **OWNER'S MANUAL SECTION 12 – CONTACTING MIZUHOSI**

☐ **OWNER'S MANUAL SECTION 13 – 6977 ELECTRICAL INTERCONNECT DIAGRAM**

☐ **OWNER'S MANUAL SECTION 14 – STANDARD COMPONENTS AND OPTIONAL ACCESSORIES**

Printed Name	Title
Signature	Date